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Original Articles

AMPUTATION THROUGH THE HIP-JOINT WITH A SYNOPSIS OF 267 CASES IN WHICH THE AUTHOR'S METHOD WAS EMPLOYED *

JOHN A WYETH, M D

NEW YORK CITY

From the dawn of surgery to within a very recent period, amputation at the hip-joint has been considered one of the gravest surgical operations

In 1808 Earle[1] described it as "unjustifiable," and said "I have seen it done and am now very sure that I will never do it unless it be on a dead body" In the third edition of his "Principles of Military Surgery," Hennen,[2] in 1829, said Obliged as we are, coolly to form our calculations in human blood, there is still something in the idea of removing the quarter of a man at which the boldest mind naturally recoils There is not one patient in a thousand that would not prefer instant death to the attempt" Even as late as 1881 Prof John Ashhurst, Jr,[3] one of the highest authorities in modern surgery, wrote "The removal of the lower limb at the coxo-femoral articulation may be properly regarded as the gravest operation that the surgeon is ever called upon to perform, and it is only within a comparatively recent period that it has been accepted as a justifiable procedure"

ORIGIN

The origin of this amputation is involved in no little obscurity Dr Louis Coronat[4] claims that at about the beginning of the eighteenth century a French surgeon, Morand, was the first to have the boldness to conceive the idea of severing the lower extremity from the body at the coxo-femoral articulation, and that the first operation of this nature was done by Lacroix, of Orleans in 1748 It is now well known that this operation by Lacroix was in no sense an amputation at the hip The ligamentum teres and the sciatic nerve were the only tissues which had not completely sloughed away at the line of demarcation in a case of gangrene which destroyed the entire lower extremity, and these Lacroix divided with scissors

In the fourth volume of "Sabatier's Medecine Operative," published in 1832, there is an account of another operation of this character, done by Perault in the case of Francois Gois, a man 21 years of age, whose thigh had been crushed by the pole of a wagon Septic infection followed by extensive suppuration and gangrene ensued until all the soft parts were dead and were separated from the bone—*le femur etait disseque de toutes parts* Through these gangrenous and bloodless soft tissues the amputation was made

Mr Frederick Treves, in Volume I of his "Manual of Operative Surgery," claims that Mr Henry Thomson surgeon to the London Hospital, was the first to perform this operation, about 1777, but the first clearly authentic record of an amputation at the hip-joint, through living tissues, is of one performed by Mr Kerr of Northampton, in 1778, on a girl of 11 years who was suffering from destructive osteo-arthritis at the hip and who survived the operation eighteen days[5] The early history of this procedure should not be passed over without mentioning the name of the French surgeon, Ravaton, who in 1743 clearly and distinctly proposed a method of amputation with disarticulation at the hip-joint, although he did not live to carry into actual practice the operation he devised

Professor Ashhurst, writing in 1881, voiced the accepted opinion of surgeons when he said "The most pressing risk in amputation at the hip-joint is that of hemorrhage," and with this fact in mind it is not surprising that the ingenuity of surgeons has been earnestly employed in devising means for controlling the circulation

CONTROL OF HEMORRHAGE

Beginning with compression of the aorta by digital or mechanical means, as advised by Pancoast, Lister, Abernethy, Donald Maclean and others, and later the intrarectal lever of Davy for compressing the common iliac artery against the pelvis the first really valuable suggestion for controlling hemorrhage was that of Richard Volkmann, the distinguished German surgeon[6] In 1874 he reported three cases of hip-joint amputation in which he had used the Esmarch elastic bandage for driving the blood out of the member to be amputated into the body, and then had placed an elastic loop in the femoro-scrotal commissure, drawing the ends upward and outward, the anterior passing parallel with Poupart's ligament, the posterior near the gluteal fold in which position it was held by an assistant To further secure it in position loops of roller bandage were thrown beneath the rubber tourniquet in front and behind, and upon these, during the operation, upward traction was also made by an assistant In two of these cases there was no hemorrhage In one Volkmann says, "a severe hemorrhage occurred which I succeeded in stopping by compression"[7] Of the three cases two died It may be that the hemorrhage in one case and the fatal result in two of the three operated upon discouraged surgeons at large from repeating this innovation of Volkmann's But scant mention was made of it in surgical literature, and it is well known the method was not adopted

In *The Lancet* in 1883, Mr Jordan Lloyd advised the use of the figure-of-eight elastic bandage which included

* Read before the New York State Medical Association October 1900

the posterior aspect of the thigh in its grasp and then passed over the rim of the pelvis, and around the body, making compression of the external iliac by means of a roller bandage placed over this artery But this method, as in the case of Volkmann did not meet with the consideration it deserved and failed to be generally adopted

The use of the needle or skewer for the control of hemorrhage in amputation at the hip was first employed on July 28, 1880, by Trendelenburg, at the suggestion of Newman [8] "A steel needle 38 cm long, 6 mm broad biconvex on cross section, and in the thickest portion or center 2 mm thick, was inserted just below the anterior iliac spine and carried in the direction of the perineum, passing between the neck of the femur and the vessels, and emerging on the inner aspect of the thigh, near the perineo-femoral crease A figure-of-eight ligature was then thrown over the ends of the needle and in front of the thigh, thus constricting the femoral artery and vein The limb having been previously emptied of blood by the application of Esmarch's bandage as high as the middle of the thigh, a long knife was carried through the front of the thigh 2 cm beyond the needle and parallel with it (Lisfranc), and a flap formed by cutting by transfixion The vessels were then tied, and the needle and figure-of-eight loop removed, and the head of the femur disarticulated The needle was again introduced behind the bone, the figure-of-eight carried posteriorly, and the posterior flap then formed"

In 1886 (August 10), Dr Muscroft,[9] of Cincinnati, employed a somewhat similar method "A needle one-eighth of an inch wide, slightly bent at the point, about the thickness of a dime and four inches long, was introduced perpendicularly into the front of the thigh about an inch and a half below Poupart's ligament The exact point of entrance was one-fourth of an inch internal to the combined sheaths of the vein, artery and nerve The point was pushed beyond the vessels then turned outward until the needle had passed beyond them, the point was then pushed out through the integument The needle was then behind the vessels and nerve A piece of cord was passed under the heel and point of the needle, forming a figure-of-eight ligature"

Myles, of England, advised a slight modification of the Newman-Trendelenburg procedure A steel skewer was passed through the thigh, the point entering an inch below Poupart's ligament, going external to the femoral artery and internal to the neck of the femur and emerging a little above the gluteal fold An India-rubber cord in figure-of-eight fashion was then to be thrown over the ends of the skewer and the inner aspect of the thigh The amputation was by lateral flaps

Author's Method—In theory and practice it is clear that any method of constriction which does not with absolute safety control all of the blood-vessels at the level of the hip-joint must prove unsatisfactory In 1888 I removed the outer half of the clavicle, the glenoid, acromion, and coracoid processes, and part of the body of the scapula together with the upper extremity, of a patient suffering from a large sarcoma of the head of the humerus Not wishing to perform a preliminary deligation of the subclavian in its third division, I transfixed, with a stout mattress needle, the major pectoral muscle about three inches from the shoulder, and, at about the same distance from the joint on the dorsum scapulæ, I introduced a second needle in such a way that when I carried a strong rubber tube several times around the shoulder, above these needles, with strong traction, the compression was so great that hemorrhage was controlled during the amputation It occurred to me at the time that the same plan was equally feasible at the hip In February 1890, I successfully applied this method in my first hip-joint amputation, and in the improvements which have been made on the original technique I believe I have demonstrated and established an operation in which hemorrhage in amputation at the hip-joint is as safely and as easily controlled as at any other portion of the thigh

The patient should be placed with the sacrum resting upon the corner of the operating-table, the sound limb and arms being wrapped with cotton batting, and the body thoroughly protected from unnecessary loss of heat The member to be removed should be emptied of blood

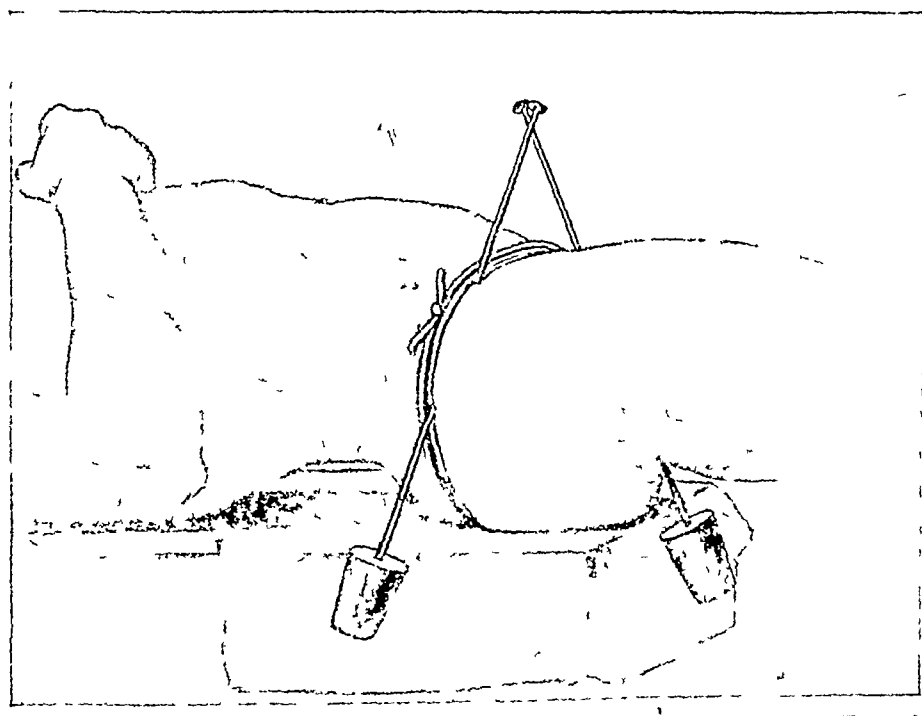

FIG 277 —Hip-joint amputation Pins and rubber-tube tourniquet in position The Esmarch bandage has been removed

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by elevation of the foot and by the application of the Esmarch bandage, commencing at the toes When a tumor exists, or when septic infiltration is present, pressure should be exercised only to within about six inches of the diseased area for fear of driving the new elements or septic material into the circulation After injuries with great destruction—crushing or pulpifaction—one must often trust to elevation alone, as the Esmarch bandage can not always be applied In this last group of cases where hemorrhage more or less severe has occurred the injection of a sufficient quantity of normal salt solution should precede any operation Before the Esmarch bandage is removed the rubber tubing constrictor should be applied The object of this constriction is the perfect occlusion of every vessel above the level of the hip-joint permitting the flaps to be made disarticulation to be completed and the vessels secured without hemorrhage and before the tourniquet is removed To render the manipulation of the femur in the process of disarticulation, free from the danger of the tourniquet slipping, I employ two strong steel needles or skewers three-sixteenths of an inch in diameter and ten inches long One of these is introduced one-fourth of an inch below the anterior superior spine of the ilium and slightly to the inner side of this prominence and is made to traverse superficially, for about three inches, the muscles and fascia on the outer side of the hip emerging on a level with the point of entrance The point of the second needle is thrust through the skin and tendon of origin of the adductor longus muscle one-half an inch below the femoro-perineal commissure or crotch, the point emerging just below the tuber ischii The points should be shielded at once with cork to prevent any possible injury to the operator No vessels are endangered by these pins A mat or compress of sterile gauze, about two inches thick and four inches square, is laid over the femoral artery and vein as they cross the brim of the pelvis, and over this a piece of strong white rubber tubing one-half inch in diameter when unstretched, and long enough when in position to go five or six times around the thigh, is now wound very tightly around and above the fixation needles and tied The Esmarch bandage is now removed and, excepting the small quantity of blood between the limit of the Esmarch bandage below and the constricting tube above the extremity is bloodless and will so remain

In several instances surgeons have operated successfully and with satisfactory control of hemorrhage by using only one of the pins as above described—the outer—and by employing assistants to hold the rubber tubing in place The operation has even been done successfully without the use of pins, but since these, if properly employed, are not at all in the operator's way, and since they render additional assistance unnecessary and assure safety by holding the tourniquet securely in place during the manipulations which are necessary to disarticulate the femur in the critical period of the operation, I hold they are essential in obtaining the best possible results

In making the flaps no fixed rule can be laid down The surgeon should always be guided by the conditions within the field of operation The accepted principle that the danger from shock diminishes in proportion to the distance of the amputation from the trunk should not be overlooked When done for osteomyelitis or for accident, where the conditions will permit, the soft structures should be divided at the junction of the middle with the upper third A perpendicular incision commencing above the trochanter and carried down to the bone along the outer aspect of the hip and thigh should join the transverse incision With the elevator, the muscles should be lifted from the bone or divided with a scissors or bistoury very close to the periosteum When the capsule is reached this should be divided on its upper aspect, keeping the point of the bistoury always directed toward the center of the neck The thigh should now be flexed on the abdomen and after cutting across the capsule posteriorly, forcibly abducted and rotated until the ligamentum teres is ruptured, and the disarticulation completed The leverage of the undivided femur is of invaluable aid in freeing the head of the bone from the socket The vessels should now be tied with strong catgut

In addition to the femoral arteries and veins, the following vessels must be secured the saphenous vein which on account of its proximity to the main ar

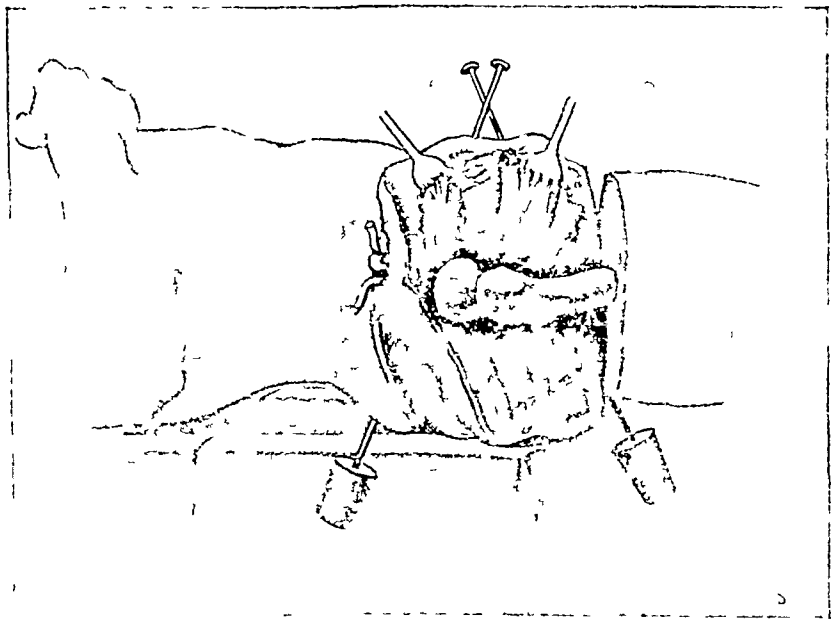

FIG 278 —The same showing the soft parts dissected from the bone and the capsule exposed. From Text Book on Surgery Copyright 1897 by D Appleton & Co

should be tied, the sciatic artery, which will be found near the stump of the sciatic nerve, the obturator, which is situated between the stump of the adductor brevis and magnus, usually about half way from the center of the shaft of the femur to the inner side of the thigh, the vessels being on a level with the anterior surface of the femur, the descending branches of the external circumflex two or three in number, usually found about an inch and a half outward and downward from the main femoral vessels beneath the rectus and in the substance of the crureus and vastus externus The descending branches of the internal circumflex are insignificant and are usually in the substance of the adductor longus and between it and the adductor brevis and pectineus, only a little below the level of the femoral artery

It is a wise precaution at this stage of the operation to loosen slowly the grasp of the tourniquet until the pulsation of the larger trunks is perceptible in order to be sure that none of the vessels have been overlooked To prevent the oozing which is more or less extensive in operations through such large masses of muscular tissue I introduce a wick of sterile gauze into the cavity of the acetabulum, packing this thoroughly in the space between the muscles from which the bone has been dissected, leaving one end of the wick to pass out between the flaps for the purpose of its removal In addition to this, with a long half-curved Hagedorn needle, armed with good-sized catgut, deep sutures are then passed through the stumps of the divided muscles, taking three or four inches in the grasp of each suture In this way large masses of muscle are brought snugly together when these sutures are tied

This method of forming the flaps and of disarticulating the femur was practically the operation devised by Ravaton in 1743, and was the method employed at Bardstown, Ky, in August, 1806, by Dr Walter Brashear, the first hip-joint amputation made in the United States [10]

When from destruction of the parts by accident or disease, or from the proximity of a neoplasm, this ideal method is not practicable, any modification may be employed, preference being given to the incision which keeps farthest from the tumor and gives the healthiest flaps When there is scant material to cover the stump, it is even safer to err on the side of an unclosed wound and trust to granulation or grafting for ultimate closing I employ silkworm gut sutures for uniting the flaps, leaving no drainage excepting the ribbon of sterile gauze which is packed into the acetabulum and the space from which the bone was removed It is usually withdrawn at the first dressing, about a week after the operation, and its place taken by a small-sized drainage-tube

In order to preclude the oozing which is likely to occur in such an extensive wound as an amputation at the hip necessitates, before tightening the silkworm gut sutures, I thoroughly dry out the flaps with sterile absorbent gauze, and while the constricting tourniquet is still in place, tighten the sutures and apply a light dressing of loose gauze which envelops the stump Over this a gauze bandage is applied, making sufficient compression to prevent the transudation of serum or the oozing of blood Additional loose gauze is now laid over the stump and is held there by firm compression with the hands of an assistant while the tourniquet is loosened, and it, with the pins, removed A figure-of-eight spica is then thrown over the stump and around the waist, the final turns of which give support to the stump and hold it snugly against the pelvis

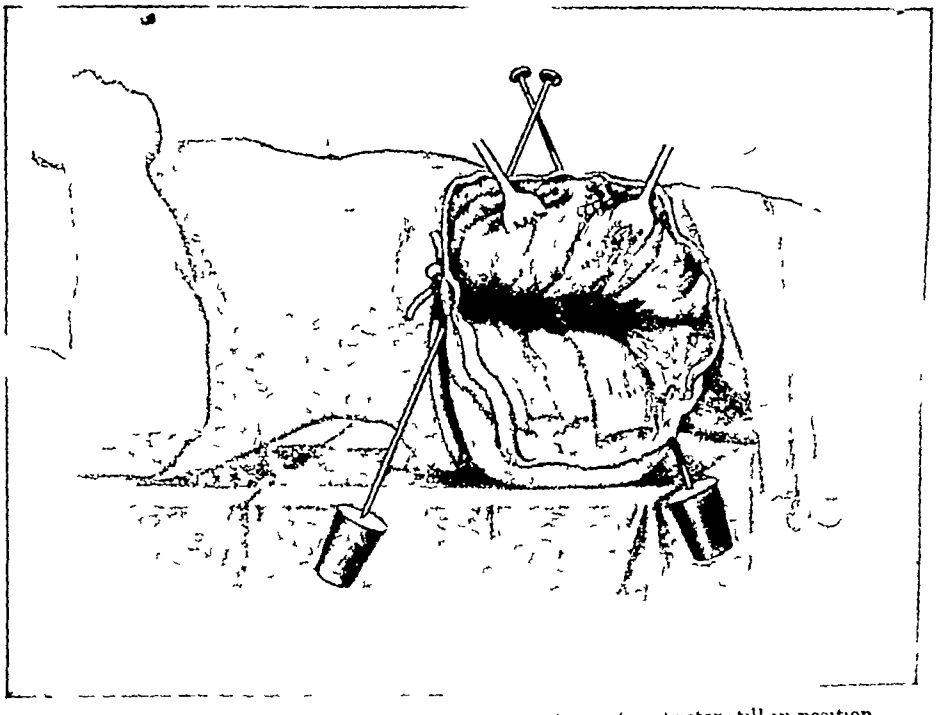

Fig 279 —The same, with the disarticulation complete Constrictor still in position
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With these precautions I have not been troubled with the oozing which has been complained of by some experienced operators It is a wise precaution to lower the upper extremity of the patient before removing the tourniquet, as this partial Trendelenburg posture takes off some of the pressure in the arteries at the seat of operation In fact, in the case of injury where extensive hemorrhage has already occurred, it is better to operate with the patient in this position, even when the intravenous injection of salt solution has been employed

Method of Digital Compression —Within recent years two other methods having for their object the control of hemorrhage in amputation at or near the hip-joint have been successfully tried and are recognized by surgeons of reputation and experience In a paper read at the meeting of the Surgeons of the Pennsylvania

Company, at Pittsburg, in 1888, Dr J J Buchanan suggested the propriety of making an abdominal section under strict antiseptic precautions, and of having an assistant introduce the hand to control, by digital compression, the descending aorta, while the amputation was being made This suggestion was received with favor by the surgeons then present, and afterward published in "Stemen's Railway Surgery" (1890) As with many other pioneers in surgery, Dr Buchanan did not have the opportunity of carrying his operation into execution but Dr Neal Hardy, of Sandusky, Ohio, who was present at the meeting in Pittsburg, where Dr Buchanan s paper was read in November 1890, applied it with success upon a male patient, 34 years of age Applying this idea of digital compression within the peritoneal cavity, to the common iliac artery, Dr Charles McBurney, of New York, has within recent years performed several amputations at the hip-joint and has commended the procedure

Method of Gradual Dissection—Another method worthy of consideration by reason of the distinguished surgeon who commends it Dr W L Estes, of Bethlehem, Pa is that of gradual dissection in which the femoral vessels are first exposed, tied and divided between two sets of ligatures The flaps are then formed as may be indicated, and the soft parts divided as for any operation of the body where a tourniquet can not be employed, all known vessels being secured before they are divided and all others caught with the forceps as soon as severed

Objections—There are several serious objections to these methods which I insist do not hold good as compared to the method which I have advised Compression of the abdominal aorta, as recommended by Dr Buchanan, of Pittsburg and practiced by Dr Neal Hardy, of Sandusky, Ohio, is objectionable in the first place because it interferes very seriously with the general circulation and throws a dangerous volume of blood upon the heart and lungs In Dr Hardy's case, he says "The patient during the operation became cyanotic, but was soon relieved on pressure being removed from the aorta" Again it necessitates an unnecessary invasion of the peritoneal cavity This latter criticism will hold good when applied to the method advised by Dr McBurney Notwithstanding the too common assertion that opening the abdominal wall and invading the peritoneal cavity under aseptic precautions is not dangerous, and that the gridiron incision carries no risk of hernia with it, I insist and believe the vast majority of surgeons will endorse this position—that we should never enter the abdominal cavity when it can be avoided Every minute of time unnecessarily lost and every unnecessary traumatism are factors in increasing the danger of shock, and this is the greatest danger in hip-joint amputation Moreover, compression applied to the common iliac artery for anatomical reasons can not control the circulation in the field of operation as well as the constricting tourniquet when employed with the pins, for the reason that the free anastomosis with branches of the opposite iliac within the pelvis and upon the abdomen must, under the increased arterial pressure cause the loss of a considerable quantity of blood, especially from the posterior flap

Results of Author's Method—The accompanying tables contain 267 cases of amputation at the hip-joint, in which the writer's method of hemostasis was employed For convenience of study they are classified into three groups 1, neoplasms, including sarcoma, carcinoma epithelioma and one case of elephantiasis and probably one osteoma, 2, septic infections, including pyogenic ostitis or osteomyelitis, tuberculous ostitis or osteoarthritis, gangrene, cellulitis and ulcer, 3, injuries with or without pyogenic infection

In the group of amputations at the hip for neoplasms, all of which were malignant in character—with the exception of one case of elephantiasis and one of osteoma—there were 131 cases of sarcoma, 5 of epithelioma of the soft parts, and one reported as osteocarcinoma None died in this group, excepting 14 fatal cases of the subdivision of sarcoma, giving the rate of mortality in disarticulation at the hip for sarcoma as 10 6 per cent, while for the whole group of 137 cases, the death-rate was 10 2 per cent Of the fatal cases 1 was complicated with gangrene for two weeks before the operation, and had a rectal temperature of 104 at the time of amputation and died of shock twenty-four hours

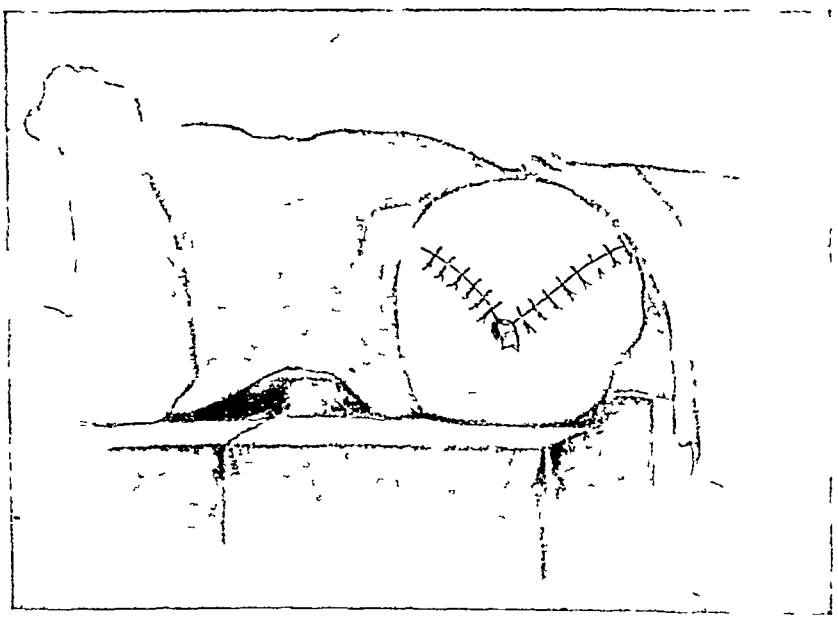

FIG 280—The operation completed
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MALIGNANT NEOPLASMS, SARCOMA, CARCINOMA, EPITHELIOMA

No	Operator	Date, Sex, Age	Cause of Operation	Result	Remarks
1	J A Wyeth	1890 M 39	Osteosarcoma, middle lower third of femur	Recover'd	Femur first divided at level of lesser trochanter Sixteen days later head and neck of bone enucleated
2	" "	1890 " 34	Neurosarcoma	"	Tumor of internal popliteal nerve was extirpated but recurred Amputation at lower third of thigh recurred and amputation at hip
3	" "	1892 F 17	Osteosarcoma	"	Amputation through lower third of femur had been done by Dr Allen of Cleveland, Ohio Recurred in stump Died six months after operation from recurrence in abdominal viscera No pulmonary symptoms
4	" "	1894 M 19	Osteosarcoma	Died	Rallied well from operation, twenty six hours later pulse suddenly rapid and weak Injection of two pints warm saline solution Death forty hours after operation Ether was the anesthetic No renal or other lesions Wound not septic
5	" "	1895 " 20	Osteosarcoma	Recover'd	Died one year after operation from "rapid pneumonia" Probably recurrence of sarcoma in lungs
6	" "	1898 " 34	Sarcoma	"	Large sarcoma attached to trochanteric region of femur and infiltrating the soft tissues as high as the obturator foramen This cavity was curetted in order to remove all suspicious tissues The anterior incision was close to the tourniquet to get above the neoplasm No recurrence two and one half years after operation
7	J A Wyeth and J A Bodine	1895 " 18	Osteosarcoma	"	No subsequent history
8	A M Phelps	1891 " 55	"	"	No recurrence in 1898
9	" "	1895 " 16	"	"	No recurrence in 1898 when patient was last heard from
10	Emory Lanphear	1892 F 28	Osteoma of femur	"	
11	" "	1898 M 19	Osteosarcoma	"	
12	H O Walker	1892 " 19	"		"We have in this a safe and reliable method for controlling hemorrhage which, in my judgment, is superior to any yet offered"
13	C B Nancrede	1892 " 32	"	"	Recurrence in stump and death six months after operation
14	" "	1894 " 35	Sarcoma	"	Recurrence in stump and death within a year after operation
15	" "	1894 F 16	"	"	No recurrence two years after operation, no subsequent history
16	" "	1895 M 30	"	"	Recurred in lung and brain sixteen months after operation
17	" "	1897 F 16	"		Recurred in stump and general metastasis in nine months
18	William F Fluhrer	1890 " 18	Osteosarcoma of femur		Spontaneous fracture at middle of thigh, April 26, 1890 "As little blood was lost as in an ordinary amputation at the middle of the thigh" Recurrence in stump in about six months and death
19	Charles McBurney	1890 M 34	"		"No other appliance that has been suggested for the purpose could in any way compare in utility with that of Dr Wyeth" No recurrence three months later No subsequent history
20	Frank Hartley	1892 F 26		"	No recurrence two years later No subsequent history
21	Merrill Ricketts	1893 " 23	"	"	"The operation was entirely bloodless" Died eighteen months, recurrence at sacro iliac synchondrosis
22	" "	1894 M 27	" lower end of femur	Died	Death in ten hours in shock Very little blood lost
23	C A White	1891 " 23	Osteosarcoma	Recover'd	Patient was up and about after the operation, but on the twenty seventh day was seized with pneumonia and died five days later
24	W W Keen	1892 F 30	"	"	Patient was five months pregnant at time of operation "It was reserved for an American surgeon to devise what is undoubtedly the best method, and, in fact, what I think we can now call the only method of hemostasis in amputation at the hip joint" Died in three or four years from recurrence in viscera No mention of involvement of lungs,
25	M J Abern	1892 M 22	"		
26	J B Murdock	1892 " 17	"	Died	Death from shock twenty two hours after operation "I believe this method to be the best and the one destined to supercede all other methods for temporary arrest of hemorrhage"
27	J McFadden Gaston	1890 "	"	Recover'd	Death on the twenty sixth day from septicemia "There was absolutely no trouble from hemorrhage, and I feel satisfied that with this process all bleeding may be prevented in amputation at the hip joint"
28	A J McCosh	1892 " 27	"	"	
29	F W Parham	1893 3	"	"	Not having the surgical pins in this child large glass headed lady's hat pins were successfully substituted Died from recurrence in lungs six months after operation
30	" "	1899 F 5m	Myxosarcoma of left knee	"	"The tumor seems to have existed at birth and had grown rapidly during the preceding weeks Fourteen months later child well
31	J M Holloway	1892 M 27	Osteosarcoma		Patient was discharged from hospital on the tenth and went to his home a distance of seventy miles on the twelfth day
32	R T Morris	1894 " 19	"Tumor" of thigh	Died	Died eleven days after operation from tubercular peritonitis Cause of death proved by autopsy "While making the skin incisions, it was noticed that the limb was not completely exsanguinated, and the tourniquet was retightened, after which no bleeding resulted"
33	H H Vinke	1894 F 16	Sarcoma of thigh	Recover'd	Used crutches in seven weeks "Absolutely no loss of blood There is probably no method which commends itself for simplicity and effectiveness so much as Wyeth's" Recurrence in two years in stump and mesenteric glands Death
34	J S Horsley	1894 M 36	Recurring sarcoma of fascia of thigh	"	"No more blood was lost than in an amputation through the thigh It remained for Dr Wyeth to so perfect this method as to make this amputation practically a bloodless operation" Died in fourteen months from recurrence in lungs
35	George W Miel	1894 " 41	Osteosarcoma of thigh		"A very satisfactory means of controlling hemorrhage" Died in eight months from recurrence in lung No recurrence in stump Lancinating pains in chest at time of operation
36	F Tilden Brown	1894 " 22	Round cell osteosarcoma involving triceps femoris	"	Hemostatic effect all that could be desired" Died within a year from recurrence in lungs
37	Robert Weir	1895 "	Sarcoma of femur		No recurrence up to February, 1898
38	F W Murray	1894 18	"		Pins were by mistake made too small, they bent caused hemorrhage Died from recurrence in lungs about four years after operation
39	W T Bull	1895 F 5	Osteosarcoma of femur	"	Primary union time of operation, 40 minutes Died in seven months from recurrence in abdominal viscera
40	Thomas R Wright	1895 M	Sarcoma of knee	"	Died in eighteen months from recurrence in right lung
41	"	1896 " 50	"		Lost comparatively no blood Temp 103 F and pulse 120 before operation Died in six months from apoplexy Negro
42	H H Grant	F 33	Chondroma with sarcomatous degeneration	"	Enormous chondroma with sarcomatous degeneration tumor weighed 65 pounds operation lasted thirty five minutes, bloodless except for oozing "Method leaves nothing to be desired" No subsequent history
43	" "	1899 M 43	Sarcoma of knee	"	Died fourteen months after operation from recurrence in lymphatics of parts above Poupart's ligament
44	W R Stewart	1895 35	Sarcoma	"	Was well November 19, 1896
45	Eugene Boise	1895 F 21		"	No loss of blood Vessels nearly all tied before tubing was removed "Method of amputation is all that could be desired" Disease recurred very early in lungs
46	L L Shropshire	1895 M 20	Sarcoma, lower middle of left thigh	"	Operation done in 30 minutes Not over one ounce blood lost Patient left hospital in two weeks living and well February, 1901
47	Howard Lilienthal	1896 " 16	Chondrosarcoma, from trochanter down	"	"Method was employed to my great satisfaction"
48	J D Rushmore	1896 F 14	Sarcoma of femur	"	
49	R Matas	1896 M 49	Sarcoma	"	No recognizable recurrence when last heard from, eighteen months after operation, but he was reported as developing "consumption," and very probably this was a metastatic process in the lung
50	W D Hamilton	1895 F 48	"	Died	Neoplasm involved knee and lower end of femur Died from shock in 5 hr
51	" "	1899 M 56	"	Recover'd	Tumor of thigh No recurrence February, 1901
52	" "	1900 F 16	"	"	" " " " " "

MALIGNANT NEOPLASMS, SARCOMA, CARCINOMA, EPITHELIOMA —(*Continued*)

No	Operator	Date Sex, Age	Cause of Operation	Result	Remarks
53	Charles S Hamilton	1899 F 32	Sarcoma	Recover'd	No recurrence in March, 1901—two years Patient has borne a healthy child since operation
54	Wm H Noble	1896 M 21	Osteosarcoma of head of tibia	Died	'Operation completed—patient in bed in forty eight minutes Died in collapse four hours later Operation was absolutely bloodless but the oozing afterward from the capillary vessels was very great, certainly half a pint, if not more, being lost "
55	W B Van Lennep	1894 F	Sarcoma	Recover'd	Died two years later with what was reported to Dr L as "acute lung trouble," or metastasis in lung "Thorough occlusion of every vessel below the hip "
56		1895 24			
57		1896 M 56	Epithelioma	'	
58	M Bauby, Toulouse France	1897 37	Sarcoma	'	"No hemorrhage no shock, no fever " (Association Francaise de Chirurgie 1897) Recurred in stump one month after leaving hospital
59	L L Hill	1893 35	Osteosarcoma		Tumor measured forty four inches in circumference
60	Thos F Chavasse	1896 F 39	Endosteal sarcoma	Died	Neoplasm involved lower third of femur where fracture had occurred six months previously Death from shock in ten hours
61		1896 ' 29	'	Recover'd	Intravenous injection of fifteen ounces of saline fluid Patient was six months pregnant Dead fetus aborted one month after operation Died thirteen months later from recurrence in left lung Stump not affected
62		1899 M 56	Periosteal Sarcoma		Neoplasm of lower third of femur where fracture occurred three days before amputation Soft parts infiltered high up necessitating division of muscles at level of acetabulum One pint saline fluid Died in eleven months from recurrence in both lungs The stump was unaffected
63		1899 F 23	Endosteal sarcoma		Neoplasm infiltrated head of tibia right knee joint and belly of semi membranous muscle Eight months pregnant Premature labor ten days before operation Died in twelve months from recurrence in both lungs Stump was not affected
64	L M Tiffany	1900 16	Osteo sarcoma	'	
65	W H Gilbert	1899 M 42	Carcinoma of shaft of femur	'	
66	John B Deaver	1899 F 24	Sarcoma of femur		
67	Robert G Le Conte	1900 M 18	Osteosarcoma left femur	'	Time of operation thirty minutes Recurrence in stump and death about six months after operation
68	Jas G Garrard	1897 37	Epithelioma of lower half of left thigh		Extensive burn of this extremity About twenty years later epithelioma developed in cicatrix Negro
69	George Heaton Birmingham England *	1896 F 29	Periosteal sarcoma		Living two years later Very little shock in either of Mr Heaton's cases
70	George Heaton	1898 M 17	Round celled sarcoma of muscles		Left semi membranosus muscle Died in fourteen months from recurrence of growth in stump
71	J F Binnie	1898 32	Sarcoma of femur		Died several months after operation from recurrence
72	W E Parker	1895 23	Osteosarcoma of femur		Living at last report, six months after operation
73	E D Martin New Orleans	1895 F 35	Sarcoma of knee		Six months later died with recurrence in stump
74	E D Martin	1896 40	Sarcoma of femur		Both operations practically bloodless No shock No further history
75	J M Maury	M 54	Sarcoma		Neoplasm followed ten years after gunshot wound of femur and was situated near the knee Suspicious signs in stump when patient left hospital No subsequent history
76	Wm B Coley	1897 F 11	Periosteal sarcoma of femur		Hemorrhage completely controlled Rubber tubing left on until vessels had been tied then slowly released thus reducing the loss of blood to a mere trifle No further history
77		1898 M 6			Died in six months from recurrence in lungs and abdomen
78		1898 F 13	Chondrosarcoma of femur		Died from recurrence in two years Location of metastasis not given
79		1898 M 49	Sarcoma of thigh (soft parts)		Died from recurrence in stump and iliac fossa eighteen months later
80		1899 F 24	Sarcoma of thigh fascia and muscles		No recurrence January 1901, about eighteen months
81	'	1900 M 45	Osteosarcoma of femur following fracture		Disarticulation completed in six minutes No recurrence January 1901 six months after operation
82	R W Stewart	1895 35	Sarcoma lower end of femur		No recurrence after two years
83	"	1900 47	'		Less than an ounce of blood lost in either of these cases
84	G K Dickinson	1894 F 50	Sarcoma of thigh	Died	Gangrene commenced two weeks before operation Rectal temperature was 104 Died in twenty four hours
85	W C Dugan	1894 M 40	Osteosarcoma of condyle of femur	Recover d	Operation lasted thirty five minutes No recurrence in seven years
86		1898 17	Osteosarcoma of shaft		To facilitate disarticulation 'the thigh was flexed on abdomen and adducted while the capsular ligament was cut on the posterior inferior portion " Died from recurrence in abdominal viscera (glands and liver) in eighteen months
87	B F Curtis	1898 50	Recurrent sarcoma		Neoplasm recurred after local extirpation Disease not in stump Death in few months
88	Leonard Freeman	1896 49	Central osteosarcoma of lower third of left femur		Spontaneous fracture while turning over in bed a few days before operation, Sept 20 1896 Rectal injection hot salt solution before operation No recurrence in July, 1900
89	D C Hawley	1896 ' 21	Osteosarcoma femur		No recurrence in 1900 Spontaneous fracture before operation
90	J H Oliver	1900 45	Epithelioma of anterior and outer surface of thigh involving shaft of bone		Died two months later from recurrence
91	J J Clausen	1894 ' 22	Periosteal sarcoma l femur		No subsequent history obtainable Negro
92	Carl Beck	1896 54	Osteosarcoma right femur	'	Died two years later Recurrence in pleura or lung
93	H A Sifton	1895 F 39	Sarcoma		Died one year later with recurrence location of recurrence not stated
94	M B Herman	M 24		'	No recurrence in eight months no later history obtainable
95	C B Schoolfield	1895 F 65	Sarcoma lower end of femur		Tumor measured twenty six inches in circumference
96	Hunter P Cooper	1897 M 30	Osteosarcoma of femur	'	Living and well two years later
97		1899 40	Large epithelioma of skin of thigh		Inguinal glands removed
98	W S Elkin	1894 14	Osteosarcoma of femur		'The simplest and safest method at our command " Recurred in liver eighteen months after operation
99	George R Fowler	1893 15	Sarcoma of lower end of femur		Sail maker s needles were used in absence of the steel pins A Jordan Lloyd figure of-8 was added for security During the operation one of the needles gave way under pressure of the constricting rubber tube necessitating the tightening of the figure-of-8 bandage Died in eighteen months from recurrence in lungs
100	'	1899 F 20	Sarcoma of femur		Died eighteen months later from recurrence in viscera
101	R H Whitehead	1895 M 16 months	Sarcoma of femur	Died	No bleeding Died on night following operation Cause not known
102	Wm D Hilliard	1898 F 44	Osteosarcoma of left thigh	'	Unfortunately patient had severe hemorrhage just before she was brought into the operating room and was considered almost hopeless from any standpoint Amputation perfectly bloodless Died in short time shock
103	Ernest Laplace	1900 M 26	Sarcoma of knee	Recover'd	Patient extremely weak at time of operation About 2 oz of blood lost
104	J J Buchanan	1899 13	Sarcoma of femur		No blood lost Death from recurrence in lungs six months later
105		1899 35	Epithelioma		Epithelioma developed in discharging sinuses of old osteomyelitis Thigh amputated at middle Malignant disease returned and disarticulation of hip performed
106	Floyd W McRae	1899 13	Osteosarcoma of right femur	'	Method bloodless tube drainage catgut sutures in stump of divided muscles silkworm gut sutures for flaps Recovery uneventful Recurred fatally in eleven months in the liver
107		1899 ' 17	' left		Recurred in left pleura near the pericardium within a year of operation
108	W B Rogers	1899 F 37	femur	Died	There was no loss of blood no shock or sepsis Died from asphyxia on twelfth day No postmortem The symptoms pointed to rapid infiltration of the air-cells with metastatic products

* See a third by Mr Heaton at end of tables

MALIGNANT NEOPLASMS, SARCOMA, CARCINOMA, EPITHELIOMA —(*Concluded*)

No	Operator	Date, Age, Sex	Cause of Operation	Result	Remarks
109	W B Rogers	1899 F 31	Sarcoma of thigh	Recover'd	Primary amputation for sarcoma of leg Disarticulation at hip on account of recurrence No subsequent history
110	Harry M Sherman	1891 " 14	Myelosarcoma, neck of femur	"	Patient living and without recurrence Sept 24, 1900
111	" "	1896 M 41	Spindle cell sarcoma, thigh	"	Death from recurrence in lungs fifteen months later
112	" "	1897 " 29	Giant cell sarcoma, neck and head of femur	Died	Sarcoma also involved the acetabulum This was curetted Death in four hours
113	" "	1897 F 17	Small round cell sarcoma of thigh	Recover'd	The skin holding the pins began to tear as the disarticulation was finished Operator made direct compression of femoral artery and completed the operation successfully Died from recurrence in lung three months later
114	" "	1900 M 8	Sarcoma of tibia and femur involving knee joint	"	Recurred within one year in scalp orbit and elsewhere
115	Charles K Briddon	1894 " 18	Sarcoma of femur	"	So little blood was lost that the patient suffered scarcely at all from shock Recurred fatally one year later in the abdominal glands and viscera of abdomen and lungs
116	" "	1897 " 15	Sarcoma of femur, high up	"	No subsequent history
117	" "	1898 F 35	Sarcoma of thigh	"	No recurrence in March, 1901, about two and one half years after operation
118	" "	1899 M 30	" "	"	No recurrence two years after operation (March, 1901)
119	" "	1900 " 23	" "	"	
120	E W Holmes	1895 F 10	Osteosarcoma of femur	"	Died from recurrence eleven months later
121	" "	1899 M 23	" "	"	Still living and well
122	" "	1899 F 22	" "	"	Died four months later from recurrence in lungs
123	Jacob Geiger	1897 M 13	" "	"	Tumor weighed 29lb Died nine months later from recurrence in lungs
124	John B Walker	F 19	Myeloid sarcoma of thigh	"	
125	Wm Jones	1891 M 35	" femur	"	
126	F A Dunsmoor	1897 M 25	Sarcoma, lower third, r femur	"	No recurrence at this date, three years after operation
127	" "	1897 F 50	Sarcoma of upper third of femur	"	Patient recovered from operation Died from general exhaustion thirty days later
128	A C Bernays	1896 " 3	Sarcoma of femur Soft rapid growth	Died	Shock
129	" "	1898 M 18	Sarcoma of thigh	Recover'd	Died twenty months later from recurrence in lungs
130	" "	1900 F 16	Elephantiasis	"	
131	" "	1895 " 17	Periosteal sarcoma of femur	"	Patient in good health in 1900
132	J D Griffith	1897 M 21	Sarcoma of femur	"	Tumor of enormous proportions (shown in accompanying cut) Patient living and well in March, 1901, nearly four years after operation
133	" "	1898 5	" "	"	No recurrence in two and one half years after operation
134	" "	1898 9	" "	"	" " " " " "
135	J H Oliver	1900 F 49	Spindle cell sarcoma, lower fourth of femur	"	Hemorrhage under absolute control
136	George Heaton	1900 M 17	Mixed round and spindle cell sarcoma of left femur	"	
137	" "	1901 " 35	Vascular osteosarcoma of middle of femur	"	

SEPTIC INFECTION, OSTITIS, ARTHRITIS, OSTEO-ARTHRITIS, TUBERCULOSIS, GANGRENE, CELLULITIS, ULCER

No	Operator	Date Sex, Age	Cause of Operation	Result	Remarks
1	J A Wyeth	1892 M 28	Tuberculous osteo arthritis of femur and acetabulum	Recover'd	Extensive infiltration and burrowing of pus sinus Anchylosis of end of femur to the diseased acetabulum, necessitating the chisel to detach it
2	Samuel H Pinkerton	1892 M 17	Tuberculous osteo arthritis of femur	"	
3	" " "	1892 M 10	Tuberculous osteo-arthritis of femur	"	
4	" " "	1892 M 42	Extensive necrosis of femur, ostitis	"	
5	" " "	1892 M 43	Extensive necrosis of femur, ostitis	Died	Death twelve hours after operation from shock no hemorrhage
6	" " "	1892 M 17	Ostitis of femur	Recover'd	
7	A M Phelps	1891 M	Long standing, destructive osteo arthritis	"	
8	" "	1892 M	Osteomyelitis of entire femur	Died	Death from exhaustion 12 hours after operation, condition of patient so bad that operation contra advised, but performed at earnest request of parents
9	" "	M, 11	Osteomyelitis	Recover'd	
10	" "	1899 F 18	Tuberculous osteo arthritis	"	Patient almost moribund from prolonged sepsis at time of operation
11	Emory Lanphear	1890 M 9	Osteomyelitis of femur	"	"Wyeth's bloodless method, by which failure to control hemorrhage seems to me to be impossible"
12	" "	1892 M 15	Osteomyelitis of femur	"	
13	" "	1893 M 28	Osteomyelitis of femur	"	
14	" "	1897 F 27	Osteomyelitis	"	
15	H O Walker	1893 M 21	Osteo arthritis	"	
16	" "	1893 M	Osteo arthritis	Died	Death from exhaustion in four hours, no hemorrhage
17	John B Deaver	1893 M 20	Osteomyelitis of femur	Recover'd	
18	J Ewing Mears	1892 M 10	Osteo arthritis of hip	"	Operation lasted thirty five minutes
19	A E Mallock	1892 M 30	Osteo arthritis of hip	"	
20	R L Swan	1893 F 19	Osteo arthritis of hip	"	
21	C B Nancrede	1898 M 50	Osteomyelitis of femur, suppurating arthritis	Died	Patient had had a compound fracture which became infected and had suppurated with varying profusion for thirty years He did well after the operation, but on tenth day quite suddenly developed symptoms of cerebral apoplexy and died in coma
22	" "	1893 M, 31	Osteomyelitis of femur	Recover'd	
23	John B Deaver	1890 F 20	Chronic osteo arthritis	"	Recovery without suppuration no hemorrhage, patient now living (1896)
24	S B Fowler	1890 M 54	Traumatic osteitis of femur, bed ridden for fifteen years,	"	Destruction of soft parts of thigh with suppuration patient was extremely septic
25	W W Van Arsdale	1896 M 13	Osteomyelitis	"	Amputation through upper third, two weeks later amputation at hip
26	F W Parkham	1895 M 29	Osteomyelitis of entire femur	"	
27	Charles K Briddon	1897 M 33	Tuberculous osteo arthritis	"	Casts and albumen in urine Greatly exhausted from prolonged sepsis
28	Charles S Hamilton	1899 M 14	Tuberculous ostitis	"	Traumatic osteo arthritis of knee and myelitis of femur necessitated amputation at middle of thigh, later above this, and finally at hip
29	Wm H Noble	1897 M 26	Osteomyelitis	"	Operation lasted thirty two minutes
30	" " "	1897 M 29	" "	"	
31	W B Van Lennep	1896 M 14	General septic infection of left leg and thigh	"	Gunshot wound of right knee in the Civil War Immediate amp at knee
32	L L Hill	1893 M 60	Osteomyelitis	"	
33	Chas G Levison	1899 M 40	Tuberculous osteo-arthritis	"	Myelitis extended through the entire length of the femur
34	" " "	1899 M 23	" " "	"	Acute pyogenic infection following tubercular osteo arthritis Patient much exhausted by prolonged sepsis Transfused about three quarts normal salt solution during operation
35	T P Webster	1899 M 40			

SEPTIC INFECTIONS, OSTEITIS ARTHRITIS, OSTEO-ARTHRITIS TUBERCULOSIS, GANGRENE CELLULITIS, ULCER—*Continued*

No	Operator	Date Sex Age	Cause of Operation	Result	Remarks
36	Thos F Chavasse* (England)	1897 F 14	Osteo-arthritis	Died	Death from exhaustion on fourth day Intravenous injection of half a pint of saline fluid
37	"	1897 F 24		Recover'd	Same amputation for osteitis in 1896 one year later amputation at knee six months later at hip
38	" "	1899 F 26	Tuberculous osteo arthritis of left knee joint septic infiltration of thigh	"	Same patient Pint of saline fluid injected
39	" "	1899 F 8	Tuberculous osteo-arthritis	"	Excision of head of femur two years before Half a pint of saline fluid injected Amyloid degeneration of liver and kidneys
40		1900 M 23	" "	"	Head of left femur excised Feb 13 1899
41	G F Shears	1896 M 26	Osteo-arthritis with general septic infiltration		The very great mortality could be materially reduced by the general adoption of this method"
42	Horace Packard	1897 M 30	Osteomyelitis		
43	G K Dickinson	1899 M 33	Gangrene of right thigh		Four months later gangrene occurred in left leg Gangrene caused by thrombosis and phlebitis Condition desperate
44		1900 F 65	Gangrene	Died	Preliminary amputation above knee, but as the muscles here were necrotic, disarticulation at hip was done Died from exhaustion and shock in five hours
45	H H Grant	1900 F 28	Osteitis right femur	Recover'd	Amputation in lower third two years before Hip was anchylosed
46	R H M Dawbarn	1896 F 30	Osteomyelitis		Died one year later with pulmonary tuberculosis
47	"	1898 F 10	Tuberculous osteo-arthritis		Perfect control of circulation
48	L S Pilcher	1900 M 30		"	
49	George P Jessup	1898 M 30	Osteo myelitis of femur		
50	J William White	1896 M 14	Total necrosis of femur		
51		1896 M 14	Total necrosis of femur with pathological fract of thigh	Died	There was extensive necrosis of right humerus and shoulder joint Patient greatly exhausted by prolonged suppuration and sepsis Died 7th day
52	" "	F 6	Destructive osteitis of femur	Recover'd	Upper third of bone almost entirely destroyed neck fractured during disarticulation No difficulty in removing head of bone
53	Lewis C Bosher	1897 M 7	Osteomyelitis, right femur		Spontaneous fracture before operation
54	"	1899 F 9	" left femur		
55	Manning Simons	M 30	Gangrene	Died	Patient at time of operation was exhausted by prolonged general septicemia The gangrene was caused by occlusion of the femoral vessels
56		M 18	"		Aneurysm five inches in diameter involving external iliac and femoral arteries Extensive hemorrhage occurred from the diseased vessels after the tourniquet was removed Died from hemorrhage and shock
57		1899 F 35	Osteomyelitis		Died three days after operation from exhaustion and chronic septicemia
58	George E Brewer	1898 M 56	General septic cellulitis with destruction of soft parts		Patient extremely septic at operation which was followed by temporary improvement Secondary infection of flaps ensued, necessitating revision which ended fatally
59		1898 M 50	Diabetic gangrene		Wound healed quickly Patient died suddenly at end of second week Supposed apoplexy
60		1899 M 45		Recover d	
61		1899 M 40	Osteomyelitis		
62	E F Robinson U S A Philippine Islands	1900 M 29	Gangrene		Gangrene caused by deligation of external iliac artery on account of aneurysm Collateral circulation was so complete that tourniquet had to be employed
63	Wm Perrin Nicolson	1896 M 35	Large ulcer in cicatrix of burn		Extensive ulcer of right thigh caused by burn in youth, undergoing seeming malignant change
64	M B Herman	M 20	Gangrene		
65		M 30	"	Died	Recovered from operation Died from pneumonia one week later
66	"	M 35	Tuberculous osteitis	Recover d	
67		M 40	Extensive septic infection of thigh (cellulitis)		
68	Hunter P Cooper	1894 M 16	Osteomyelitis of femur		Whole shaft of femur destroyed Highest temp after operation 99 5° F
69		1897 F 13			Operation at college clinic Patient removed in ambulance immediately to her home This method marks an epoch in modern surgery"
70	Wm D Hilliard	1898 M 60			Osteo-myelitis of thirty five years duration from gunshot wound at Gettysburg 1863 Perfectly bloodless
71	W B Rogers	1896 F 16	Osteo arthritis of hip-joint		
72		1896 M 38	Rapidly developing gangrene	Died	Died 40 hr after operation from general septic infect n prior to amputat'n
73	Harry M Sherman†	1896 M 7	Tuberculous osteo-arthritis	Recover d	
74		1897 M 14			
75		1897 F 8			
76		1898 M 10			
77		1898 F 13		Died	
78		1898 F 19			
79	S T Hunkin	1898 M 6		Recover d	
80	Charles K Briddon	1897 M 33			No bleeding from upper tissues
81	Tilman Ramsey	1900 M 34	Osteomyelitis of femur		
82	George F Wilson	1898 M 11			Epiphysis and joints also involved (not tubercular)
83		1898 M 15		"	
84		1899 F 21	Gangrene of extremity		
85	Wm Jones	1894 M 65	Tuberculous osteo-arthritis of hip		
86	Charles H Frazier	1900 M 21	Tuberculous osteomyelitis (with arthritis?)		
87	Andrew C Smith	1896 M 68	Osteitis of femur		
88	J D S Davis	1897 F 13	Tuberculous osteomyelitis of femur		The entire upper half of femur and the acetabulum were involved The diseased surfaces of the cotyloid cavity were removed Cured
89		1898 M 11	Tuberculous osteitis of head of femur		
90	A C Bernays	1894 M 39	Tuberculosis of femur hip and knee joints		
91	Edwin Walker	1900 M 15	Chronic osteomyelitis of femur		Patient much exhausted by sepsis of two years duration Not exceeding two ounces of blood were lost
92	Thomas F Chavasse	1898 F 23	Extensive ulcer of thigh with infantile paralysis		Amputation at knee three years One pint salt solution in vein at time of operation
93		1901 M 29	Gangrene from traum aneurysm of right femoral artery		One pint salt solution before operation
94	Harry M Sherman	1900 M	Tuberculous osteo-arthritis of hip		

* See two additional cases by Mr Chavasse at end of tables † See additional case by Dr Sherman at end of tables

later The second had a severe hemorrhage immediately before the operation, from breaking down of the neoplasm and was practically hopeless when it was undertaken A third recovered from the operation and died from tubercular peritonitis, on the eleventh day while in a fourth case, after a good recovery from the operation the stump became infected and the patient died from septicemia on the twenty-sixth day In a fifth the neoplasm involved the acetabulum and the pelvis, which necessitated curettage of an extensive region, death following from shock within four hours In a sixth case there was no shock nor hemorrhage, the patient died suddenly, from asphyxia, twelve days after the operation no post-mortem was made, and the cause of death was unknown The other 8 died in shock from four to twenty-six hours after the operation

INJURIES WITH OR WITHOUT PYOGENIC INFECTION

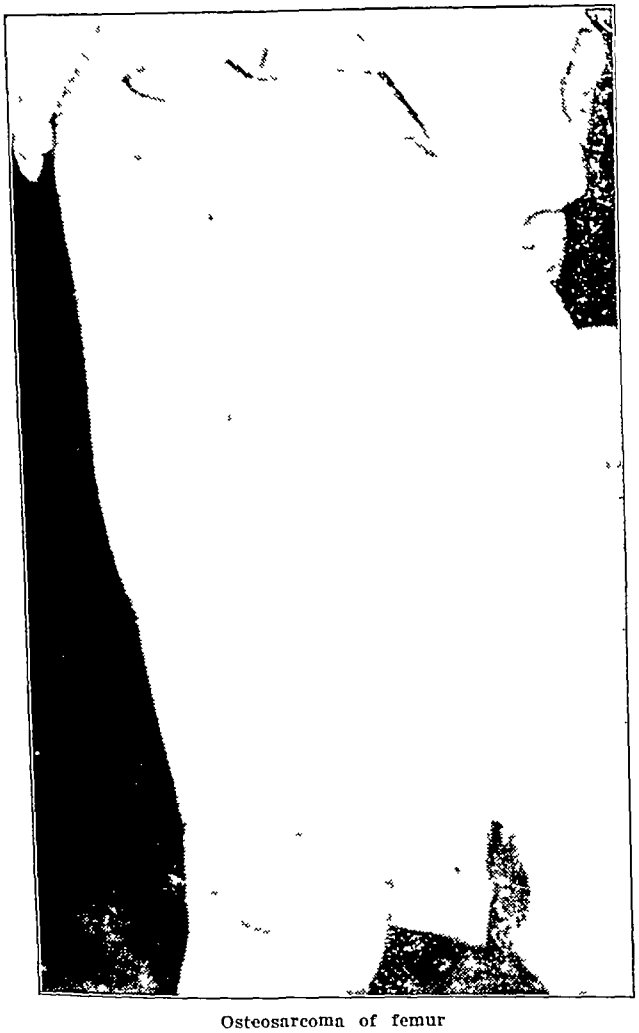
No	Operator	Date, Sex, Age	Cause of Operation	Result	Remarks
1	Samuel H Pinkerton	1892 M 6	Compound, comminuted, gun shot fracture of femur	Died	Two hours after operation, death from shock
2	G A Baxter	1891 " 17	Railroad pulpefaction of r foot, leg, l lower extremity as high as middle of thigh	"	Patient rallied well four hours later raised himself to reach a glass of water, and instantly expired, no bleeding after operation
3	" "	1896 F 4½	Crush of leg and thigh by car wheel	Recovered	Operation immediate Car wheels passed twice over this extremity crushing bone, with extensive laceration of soft tissues
4	W Johnston	1892 M 39	Railroad pulpefaction of lower extremity as high as middle of thigh	Died	Death ninety hours after operation from shock and exhaustion "There was not one drop of arterial blood and only a slight venous oozing from the muscular tissue"
5	J D Thomas	1891 " 18	Femoral vessels divided in Scarpa's triangle by red hot iron bar, impend gangrene	"	Great hemorrhage from the accident On seventh day after injury, amputation, death thirty six hours later, no bleeding after operation
6	A Schachner	" 55	Fracture of femur, gangrene	Recovered	First dressing six days after operation
7	Daniel Strock	1894 " 35	Limb pulpefied	Died	Railway crush, including upper third of thigh Hemorrhage entirely controlled Patient died of shock Patient bled profusely before admission to hospital
8	R Matas	1894 " 27	Traumatic gangrene	"	Entire lower extremity gangrenous with great edema General septicemia "Saline infusion alone prevented death on the table"
9	" "	1898 " 58	Crush by machinery	"	Extensive comminution of bone and pulpefaction of soft parts Kidney lacerated Died from shock
10	George W Crile	1898 " 26	Injury of hip and thigh	Recovered	Crushed under railway train Considerable hemorrhage at time of accid't
11	Wm B Van Lennep	1897 " 46	Compound comminuted fracture of right thigh	Died	Died from shock within a few hours
12	L L Hill	1894 F 14	Gunshot wound	"	Died in eighteen hours from shock
13	Chas G Levison	1899 M 50	Crush by elevator		Operation twenty four hours after accident Gangrene in one lower extremity extending almost to the hip, the opposite leg was gangrenous to the knee Pulse before operation 160 Hemostasis complete Duration from beginning to end twelve minutes Died six hours later
14	W S Bickham	1895 " 48	Comminuted gunshot fracture of femur, upper third	Recovered	Saline infusion
15	" "	1897 " 50	Crush and pulpefaction of thigh gangrene	Died	Gangrene of entire extremity as high as seat of wound
16	W E Parker	1895 F 8	Railroad crush		Hemorrhage well controlled Died in 12 hr from shock "Good quantity of salt solution injected, but the good effect was only temporary"
17	George L McCoy	M 35	Severe crush by machinery	Recovered	Severe hemorrhage at time of accident Two pints saline fluid injected in vein at elbow before operation He rallied from profound shock
18	G K Dickinson	1892 " 25	Compound comminuted fracture	Died	Died in shock Hemostasis complete Subcutaneous injection of saline fluid by rectum No intravenous injection
19	W C Dugan	1896 " 30	Railroad injury	"	Thigh was amputated for injury at upper and middle third Secondary hemorrhage occurred and stump was cut through higher up, and the fragment of bone disarticulated Died eight hours after last operation
20	B Hatchett	1891 " 31	Legs crushed under car wheels	"	Died 48 hours after operation Internal injuries One extremity amputated at hip the other just below knee Absolutely no loss of blood
21	H A Sifton	1897 " 45	Railroad crush of thigh		Intravenous saline injection, 2000 c c before amputation "I have often used saline injections before operating in severe railroad injuries with most gratifying immediate results I have, however, observed symptoms in some of the fatal cases after its use which I have thought might be due to the direct effect of the fluid upon the blood"
22	" "	1898 " 22	Railroad crush of thigh with compound dislocat'n of hip	Recovered	
23	E F Robinson, U S A, Philippine Islands	1900 " 62	Gunshot wound of femur, explosive effect	Died	Died in twelve hours from shock While under ether and before operation one pint normal salt solution was given by hypodermoclysis During operation the pulse became very weak and one quart of salt solution injected into veins, followed by marked improvement in heart action Symptoms of shock supervened about seven hours later, and a pint more was thrown beneath the skin
24	E A Neely	1900 " 41	Gunshot wound of femur	Recovered	Operation four months after injury Although patient was in bed from prolonged septic absorption, he stood the amputation so well saline injection was not required
25	Wm Perrin Nicolson	1896 " 22	Railroad crush	Died	Operation performed when condition of patient was bad on account of other injuries Hypodermatic injection of salt solution Died in shock five hours later
26	P B M Miller	1898 " 21	Gunshot wound of thigh	Recovered	Charge of large bird shot entered the thigh over trochanter major carrying away all the bone here except a fragment the size of an English walnut which was lodged beneath Poupart's ligament Patient greatly exhausted from hemorrhage and three days' journey to reach assistance No intravenous injection of saline solution
27	George R Fowler	1900 " 29	Compound fracture of femur with destructive ostitis	"	
28	Wm D Hilliard	1896 " 35	Railroad crush	Died	Compound comminuted fracture of thigh with great laceration of soft parts and much hemorrhage Amputation eight hours after injury Perfectly bloodless Died of shock in a few hours
29	Frank D Smythe	1898 " 32	Railroad crush,	"	Left thigh crushed and soft parts pulpefied Salt solution injected before operation Died from shock day of operation
30	P J Kirschener	1899 " 33	" "	"	Died twelve hours after operation
31	H C Deaver	1900 " 22	" "	Recovered	
32	George R Dean	1894 " 35	" "	Died	Car wheel crush and pulpefaction of thigh, involving the ilium and outer rim of the pelvis Severe hemorrhage, with profound shock No infusion Died in three hours from shock
33	" "	1896 " 24	" "	Recovered	Comminution of femur from knee to middle third of thigh with pulpefaction of soft structures to near hip
34	R Harvey Reed	1895 " 28	Crush of leg and thigh	"	
35	" "	1896 " 30	" "	Died	
36	" "	1898 F 10	" "	Recovered	

Under the heading of septic infection, 94 hip-joint amputations were made As recorded, they are classified as follows Pyogenic ostitis or osteomyelitis—not tuberculous—36, with 5 deaths a mortality ratio of 14 per cent, tuberculous ostitis or osteoarthritis 41, with 4 deaths, or 9 7 per cent, gangrene—moist and diabetic—12, with 6 deaths, or 50 per cent, general cellulitis 3, with 1 death or 33 1/3 per cent, ulcer from breaking down of an extensive cutaneous surface 2, with recovery, total for septic infections, 94 cases, of which 16 died, or 17 per cent Practically all the fatal cases were in a condition of great exhaustion due to prolonged sepsis, or they died from causes not directly referable to the operation Of the five fatal cases in the first group 1 was in such a seemingly hopeless condition that the operation was not advised It was only done at the urgent insistance of the child's parents The second case was almost equally emaciated and anemic from prolonged septic absorption A third fatal case was complicated with a fracture which had existed for several months before the operation, while a fourth died of cerebral apoplexy on the tenth day, the cause of death not being referable to the operation

For tuberculous ostitis and osteoarthritis—or hip-joint disease—4 out of 11 died or 9 7 per cent There were no serious complications in these 4 fatal cases,

although they were weakened by the prolonged sepsis and waxy degenerations which are characteristic of tuberculosis in the bones The operation was undoubtedly the immediate cause of death in each of these

In the case of gangrene, as one would naturally suppose, the death-rate was exceedingly high 6 of the 12 ending fatally In 1 of these a preliminary amputation was made above the knee and as the muscles were gangrenous at this level a second operation of disarticulation at the hip-joint was done, followed by shock and immediate death In the second case in which an aneurysm five inches in diameter involved the external iliac and femoral arteries while the hemostasis was complete during the operation, exhaustive hemorrhage followed the removal of the



Osteosarcoma of femur

tourniquet the bleeding coming from broken-down vessels at the seat of the aneurysm The patient was septic and greatly exhausted by reason of the gangrenous condition of the entire lower extremity In the third, the patient died from pneumonia, a week after the operation Two other fatal cases had prolonged septicemia, to which with the added shock of the operation, they quickly succumbed A sixth case of diabetic gangrene had practically recovered from the operation, but died from cerebral embolism at the end of the second week One case of cellulitis died out of 3 the fatal one being extremely septic and anemic at the time of operation Improvement followed but secondary infection of the flaps took place, necessitating a revision which was followed by death One case of extensive ulcer resulting from the breaking down of scar tissue following a burn in youth was of doubtful diagnosis, but was classed as an ulcer because no demonstration of epithelioma was made

In the third group injuries with or without septic infection, there are 36 cases with 23 deaths, a mortality ratio of 63 9 per cent Twenty-four disarticulations at the hip were performed on account of extensive injuries to one or both lower extremities by railway trucks or heavy machinery Of these, 16 died, a mortality ratio of 66 6 per cent When we consider the character of these injuries and the unfavorable conditions to which the patients were subjected, this high rate of mortality is not surprising Hemorrhage more or less severe occurred in all cases, and it was difficult and at times impossible, to overcome the shock which supervened It is more than probable that had the intravenous injection of a saline solution been made before all of these were subjected to operation, the ratio of mortality would have been decreased since the majority of the fatal cases died in shock and before septic infection was observed

CASE 2 —Here the right leg and foot and left lower extremity were crushed as high as the middle of the thigh Amputation was performed at the hip on one side and at the knee on the other The patient died in shock four hours afterward

CASE 3 —This patient presented a crush of the leg and thigh by a car wheel, with extensive laceration of the soft tissues Operation was immediate and he recovered

CASE 4 —Pulpifaction of the lower extremity, as high as the middle of the thigh was present here and the patient died in ninety hours, from shock

CASE 7 —Here there was crush and pulpifaction as high as the upper third of the thigh Profuse hemorrhage occurred before admission The patient died of shock within a few hours

CASE 10 —A crush of the hip and thigh with considerable bleeding at the time of admission was followed by recovery

CASE 16 —Death in twelve hours, from shock Salt solution was injected into the veins

CASE 19 —This patient recovered from the first operation, but secondary hemorrhage ensued Amputation at the hip joint was followed by death in eight hours from shock

CASE 20 —Death in forty eight hours, here followed one extremity amputated at the hip, the other just below the knee There were also internal injuries

CASE 21 —This patient died within a few hours, from shock Salt solution was injected into the veins

CASE 22 —This case was a crush of the thigh, and compound dislocation of the hip The patient recovered

CASE 25 —This patient died of shock, in five hours Salt solution was tried hypodermically The patient's condition was practically hopeless on account of other injuries

CASE 28 —Here a railroad crush presented great laceration and much hemorrhage Amputation eight hours after injury resulted in death in shock within a few hours

CASE 29 —This was also a railroad crush, of the left thigh the soft parts pulpified Salt solution was injected into the veins Death followed in twenty hours from shock

CASE 30 —This patient died in twelve hours, from shock

CASE 31 —Recovery resulted

CASE 32 —Crush and pulpifaction here involved the thigh and the ilium and outer rim of the pelvis, with severe hemorrhage The patient died in three hours, from shock

CASE 33 —Here the femur was crushed from the knee to the middle third of the thigh, with pulpifaction of the soft structures to near hip Recovery followed

CASE 34 —A crush of the leg and thigh was here followed by recovery

CASE 35 —Death followed a crush of the leg and thigh in this case

CASE 36 —Recovery was the result after a crush of the leg and thigh in this instance

MACHINERY CRUSHES

CASE 9—This patient presented extensive comminution of bones, pulpifaction of the soft parts, and the kidney lacerated Death in shock followed

CASE 13—A crush in an elevator was followed by operation twenty four hours after the accident Gangrene had supervened in one extremity, almost to the hip, and in the opposite leg to the knee The patient died in six hours, from shock

CASE 15—Crush and pulpifaction of the thigh, with gangrene of the entire extremity as high as the seat of the wound, resulted fatally

CASE 17—A severe crush by machinery, with extensive hemorrhage at the time of the accident, resulted in recovery Two pints of saline fluid were injected into the veins

COMPOUND COMMINUTED FRACTURES

CASE 6—Comminuted fracture with gangrene was followed by recovery

CASE 8—Traumatic gangrene of the entire lower extremity existed, with great edema and general septicemia The patient died Saline infusion alone prevented death on the table

CASE 11—This patient died in shock after a few hours, in a case of compound comminuted fracture of the right thigh

CASE 18—This patient presented a compound comminuted fracture, received subcutaneous salt solution, and by rectum, but died in shock

CASE 27—This compound fracture with destructive ostitis was followed by recovery

GUNSHOT WOUNDS

CASE 1—A gunshot wound, compound comminuted fracture, with immediate operation resulted fatally in two hours, from shock

CASE 12—This gunshot wound, with extensive lacerations and hemorrhage, caused death in eighteen hours, from shock

CASE 14—The same, with compound fracture of the upper third, with saline infusion, resulted in recovery

CASE 23—This patient received a gunshot wound with an explosive missile While under ether and before operation, a pint of normal salt solution was given under the skin During the operation a quart was injected into the veins, followed by marked improvement of the heart's action Symptoms of shock supervened about seven hours later, and a pint more was thrown beneath the skin, but he died within twelve hours, from shock

CASE 24—In a gunshot wound of the femur, operation was not done until four months after injury The patient was in bad condition, from prolonged sepsis No saline injection was used Recovery followed

CASE 26—A gunshot wound caused by a charge of bird shot entering over the trochanter shattered the bone The patient was greatly exhausted from hemorrhage and a three days journey to reach assistance No intravenous injection was made He recovered

CASE 5—This patient had gangrene resulting from division of the femoral vessels by a red hot bar of iron Gangrene ensued on the seventh day, before amputation was done Death resulted in thirty six hours from shock

In addition to the foregoing I have two cases of railway crush of the thigh and hip in which the same method of hemostasis was employed, in which the femur was divided in one instance at the lesser trochanter, and in the other one and one-half inches below this point There were extensive lacerations of the gluteal region beyond the level of the hip in one of these cases, while in the other the right leg and thigh bones were crushed to pulpifaction to within eight inches of the hip-joint This patient was not discovered until several hours after he was run over by a train of cars, remaining on the cold ground throughout a greater portion of the night He was then brought fourteen miles to the hospital, when the amputation was made These two cases of recovery would reduce the death-rate to 60 5 per cent but since they are not disarticulations, I have not included them in the statistics The operators were Dr P B Barringer, Charlottesville, Va, and Dr A W Knox, Raleigh, N C

I have an additional and very instructive case occurring in the practice of Dr George E Brewer, in which the method of hemostasis was employed for gunshot wound of the middle and upper third of the thigh, but as the bone was divided near the lesser trochanter and disarticulation not performed, I have not included it in the statistics This injury was inflicted with a soft-nose missile of high velocity, striking the femur about the middle, comminuting this bone from near the knee to the trochanter, with extensive destruction of the muscles by reason of the explosive effect of this form of bullet The pins were extemporized from fence wire and the hemostasis was reported as complete ‡

Of the 267 cases of disarticulation at the hip-joint for all causes herewith reported, 53 or 19 8 per cent, died Every fatal case is recorded, and this list includes a number that died from intercurrent disease, such as pneumonia and apoplexy, although the cause of death was not justly referable to the operation Several died from sepsis, one on the twenty-sixth day, which, as Mr Chavasse of the Birmingham General Hospital remarks, "was an avoidable cause of death"

In many of the accident cases, while it was none the less the duty of the operator to give the patient this last chance for life the extensive mutilations, such as the crushing of one or both lower extremities under car wheels or in machinery, and the exhausting hemorrhage which occurs in most of these, together with grave injuries of the viscera, made a fatal termination almost inevitable Moreover, in the fatal cases in which the amputation was done for the relief of moist and diabetic gangrene, the prognosis was almost as unfavorable as after the most extensive injuries In Ashhurst's "International Encyclopedia of Surgery," issued in 1881, Dr F C Shepperd gives to that date a total of 633 cases of amputation through the hip for all causes, with a mortality ratio of 64 per cent In *The Lancet* for March 5, 1892 Mr Frederick Page gives 16 cases in which the amputation was done by other methods for disease in the Royal Infirmary, Newcastle-on-Tyne, with a ratio of mortality of 37 5 per cent The death-rate for disease in the statistics herewith given is 17 per cent Dr John Erdmann, of New York, collecting the figures of eight hospitals of this city, gives 18 cases done by all methods with 8 deaths, mortality ratio of 44 4 per cent Of these 18 cases, in 7 the method of hemostasis here advised was employed, and all of these recovered leaving in this list 8 fatal cases in 11 amputations done by other methods Asepsis must share with the improved hemostasis the credit of this diminished rate of mortality These 267 amputations were performed by 123 different operators, and under all the varying conditions of civil and military practice

The simplicity and efficiency of the method is evident in the fact that from the country practitioner with inefficient assistance and limited experience in major

‡ In the 'Medical and Surgical History of the War of the Rebellion,' there is given a list of all amputations at the hip joint done in military practice to the date of the issue of that volume They are divided into 1, primary 2 intermediary, and 3, secondary periods, and re amputations

There were 53 amputations in the primary period—within the first twenty four hours after receipt of the injury—with two recoveries a death ratio of 96 2 per cent Of those done in the intermediary period i e, during the inflammatory stage and reckoned from the third to the thirtieth day, both inclusive, there were 32 cases with 3 recoveries, a mortality ratio of 90 6 per cent In the secondary period, i e after the entire abatement of the acute inflammatory stage and after the thirtieth day, there were 31 operations with 4 recoveries, a mortality ratio of 87 per cent

surgery to the metropolitan surgeon with all the accessories of the modern technique, it has almost without exception met with full approval and adoption The few objections which have been advanced, as for instance the difficulty of disarticulation and the free oozing from the large muscular surface divided, can no longer hold in the present improved technique of the operation We all agree with Mr Chavasse, who says, in his excellent article already quoted, that "it is quite possible and probable that cases operated upon by a variety of surgeons will show a larger mortality-rate than if one particular surgeon had had the entire experience and we are justified in concluding that an improved modern technique of operating which includes the antiseptic and aseptic methods has reduced the mortality of a formidable procedure to such really small dimensions that in suitable cases there is no longer any actual excuse for procrastination and that we are justified in urging operation in cases which up to now we have been content merely to recommend'

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THE OCULAR EXPRESSION OF INTRANASAL LESIONS

ROBERT SATTLER M D
CINCINNATI OHIO

Ocular symptoms are not uncommon attendants of focal suppuration of the nasal cavities

Although admittedly more frequent, it is by no means established that such local suppuration starts invariably in one or several of the pneumatic accessories of the nose Focal suppuration may also begin, in a smaller number of cases, in the mucosa without implication of the sinus cavities, especially in the inferior, anterior portion of the middle meatus and even of the septum nasi

It is also certain that various ocular symptoms which attend so many intranasal lesions—because they are so frequently and commonly met with—are looked upon as transitory and uncertain reflex phenomena and are regarded of little diagnostic importance For this reason they do not receive the attention they deserve and are often peremptorily disposed of as not worthy of much consideration Nevertheless, telling evidence that a better knowledge of the interdependence of the symptoms of intranasal and ocular lesions is at hand, is being constantly furnished by numerous contributions from rhinologists as well as oculists—each from his point of view adding practical suggestions which must serve the common purpose of more accurate information of diagnosis and a more successful therapy

Within the range of this brief communication, no reference will be made to the ocular symptoms in general These are on the whole fairly well known Mention will be confined to certain phases of more uncommon intranasal lesions which so far as their ocular expressions are concerned, have not been fully described It must furthermore be stated that the observations and conclusions about to be mentioned, bearing on this point and of common interest to both specialties, are here considered wholly from the standpoint of the ophthalmologist, also, that the successful management of ocular symptoms in cases of this class is unsatisfactory or impossible until their dependence upon a nasal lesion is recognized

Two classes only, of intranasal lesions, will be considered They both furnish the oculist with perplexing experiences and with unlooked for disappointments

The first group includes certain chronic lesions which invade the anterior region of the middle meatus of the nose—the most anterior cells of the ethmoidal labyrinth—bulla ethmoidalis, the region of the uncinate process, hiatus semilunaris and infundibulum

The point of interest is that the morbid changes which are enacted and account for persistent ocular phenomena are attended by a lesser or even an entirely negative expression on the part of the nose Often a most careful search must be made before a focal suppuration of the mucosa of the nose or of the air-cells of the locality is discovered In some cases cystic distention of the cells with choking of their contents and plugging of their ostia, caries of their bony walls and even the remote sequences of former morbid processes—solidification or rarefaction of the framework of the bone—are found, in others, all tangible evidences are absent until revealed by an exploratory operation undertaken mainly for purposes of diagnosis

It must also be remembered that the region in question is often the seat of an anomalous individual development to which a congenital legacy of syphilis or scrofulous and rhachitic manifestations during early life, afford the necessary predisposition The growth and subsequent development of the ethmoidal labyrinth are so altered that excessive and abnormal crowding or impaction of the anterior and lateral air-cells results It can furthermore be assumed that in such cases more or less interference with the physiologic purposes must follow, and that the declaration of any morbid process may be attended by rather uncommon symptoms

Clinical Expressions of Lesions—Two principal clinical expressions of lesions of this region of the nose on the part of the eyes are met with

1 Persistent injection of the vessels of the ocular conjunctivæ with prominence and distention also of the muscular branches, often accompanied by passive edema of the retrotarsal folds The palpebral conjunctiva does not ordinarily participate in this vascular engorgement There is no abnormal secretion in quantity or quality, but there is present much functional distress of the eyes Not infrequently there is observed a retraction of the upper lid and that peculiar stare which is so generally associated with a retarded lid action due to disordered innervation of the sympathetic fibers

2 The other or second clinical expression dependent on the same or a similar intranasal disturbance, consists of a group of far more unmanageable and persistent symptoms In cases of this class, the most persistent neuralgic phenomena, not conspicuous because of their severity, but mainly for their persistent nagging features, are present, associated with the most distressing functional disturbances of the eyes

Any continued effort in reading, or other close work, produces prolonged and severe suffering This is most pronounced during the early part of the day and wears

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away toward its close and at night The pain is neuralgic in character It is referred to certain points along the inner wall of the orbit, the eyeball and the brow The most uniformly present points of pain are those along the inner and upper orbital wall They can be easily discovered by passing and pressing the finger against the inner wall of the orbit at a short distance from the free margin Exposure to bright light, sudden changes of temperature, over-heated air laden with dust or irritating vapors—in fact, anything which may irritate the mucous surfaces of the nose through external agencies, as well as internal ones resulting from excessive mental fatigue, an overwrought nervous system from worry or other reasons, are the exciting causes for this persistent suffering referred to the eyes and frontal regions

As already stated, most subjects of this class are neurasthenics in the fullest sense of the word For this reason there is present an almost interminable train of nervous phenomena—functional and transitory—but nevertheless excessively annoying to the sufferer

This is an incomplete account only, of the ocular symptoms The description of these cases is not complete until a brief mention is made of the pathologic changes which are responsible for them, so far at least as they are at present known or understood It must also be admitted that not until the nose is regarded as furnishing a possible starting-point and cause for the ocular lesions, can such cases be satisfactorily managed The most searching examination of the eyes, followed by the correction of any optical error or muscular anomaly, no matter how trivial will fail to bring about even partial relief from the annoying symptoms The experience of every oculist furnishes one or many instances of this class Doubtless, in all or most of these cases—for this should be the rule in every case of persistent irritation of the conjunctiva or neuralgic disturbance without tangible cause on the part of the eyes—a careful examination of the nose has been made Such examinations are often attended with negative results Even in those cases referred for more accurate examination to the rhinologist which are sent back with a negative opinion—that the nose offers no positive evidence of a morbid process sufficient to account for the annoying symptoms—efforts should not be abandoned to seek and find the cause for the annoying eye symptoms in the concealed localities of the nose referred to

My experience has long made me familiar with these cases In one of the earlier observations, the general conclusion so frequently confirmed, that lesions of the frontal sinus and anterior ethmoidal cells are commonly associated, was not upheld by the disclosures of surgical intervention The frontal sinus was found normal in size and the mucous lining healthy The obstinate neuralgic symptoms persisted By accident, later I discovered a focal suppuration in the anterior portion of the middle meatus of the nose Careful probing led to the discovery of denuded bone and empyema of the cells These were broken down, thoroughly curetted and free drainage established The symptoms speedily subsided Recent observations have added to this accidental discovery In my experience with these cases I can only confirm what has been already established by others that the lesion on the part of the nose is frequently a local suppuration which begins in the mucosa It may, in certain cases, be independent of it, but it is generally associated with a latent empyema, caries of the walls, hyperostosis or rarefaction of the air-cells of this locality

It will also be found that in a larger proportion of cases of this class with the symptoms described, there is not an implication of the frontal sinus, but the pathologic changes are enacted in the region of the infundibulum, hiatus semilunaris and outlets of the air-cavities of the anterior locality of the ethmoid These are often latent clinically and, for this reason, difficult of discovery even if the most careful methods of examination are followed

Another point which deserves to be emphasized—as far as my personal observations are concerned—is that in most of these cases congenital causes, or those which exert their baneful influences early in life—syphilis, rhachitis, scrofula, etc—often furnish the individual predisposition for these obscure intranasal lesions and their ocular attendants

The second group refers to cases better understood and unmistakable so far as the diagnosis and general character of the nasal and ocular lesions are concerned

There is invariably present in these cases a focal suppuration in the nose—of the inferior meatus inferior turbinate—or of the adjacent cells of the ethmoid and frequently of the maxillary sinus The nasal lesion, however, because of the dominant ocular symptoms, does not receive adequate attention

The cases referred to are those which are considered the most unmanageable of tear-sac and nasal duct lesions Chronic suppuration with fistulæ of the tear-sac and granular degeneration of its mucous linings are present, together with thickening of its walls, vicious bone-ulceration and sequestration on the part of the osseous portion of the nasal duct, focal suppuration of the inferior meatus of the nose, ethmoidal labyrinth maxillary sinus, etc

These are the cases in which the radical extirpation of the tear-sac by cauterization or excision, with or without removal of the lachrymal gland, is necessary The removal of the lachrymal gland may not be necessary in all cases If the removal of the tear-sac is thoroughly accomplished, and if the nasal lesion at the same time receives the attention it deserves, good and permanent results can be obtained without it For this reason, the removal of the lachrymal gland should not be resorted to in surgical ventures of this kind, until it has been demonstrated that this is a necessary measure

The method which has furnished me with the best results includes, in addition to the most radical extirpation of the tear-sac—excision, curettage—equally thorough attention for the nasal lesion

Briefly described, the operation which has been practiced successfully in numerous instances, consists 1, in the destruction and obliteration of the canaliculi or entrance to the dilated and suppurating tear-sac, by the aid of the galvanocautery This is followed by excision of the tear-sac through a large incision until every vestige of the soft parts, the circum-saccular thickenings and fistulous tracts, etc, are removed The osseous canal—the most important feature of the operation—is now widened with chisel, mallet and curette until a free, funnel-shaped communication with the nose has been secured and every trace of carious or sequestered bone has been thoroughly removed The adjacent smaller cell or cells of the turbinates, as well as the cells of the ethmoidal labyrinth, are next opened, explored and, if necessary, curetted until the floor of the inferior meatus is reached The inferior and middle turbinate are as thoroughly removed as the judgment of the surgeon may direct, to bring about a large and free cavity The external wound is closed with sutures

The advantage of this method is that the external wound closes and heals up rapidly and drainage or whatever subsequent treatment may be necessary, is accomplished with ease through the nose The after-treatment is much shortened and less painful, and the resulting scar much less conspicuous

A BRIEF NOTE ON THE PATHOLOGY, DIAGNOSIS AND TREATMENT OF NASAL ACCESSORY-SINUS AFFECTIONS *

E LARUE VANSANT, M D

Professor of Diseases of the Throat and Nose Philadelphia Polyclinic Surgeon to the Throat Nose and Ear Department of the Howard Hospital Fellow of the College of Physicians of Philadelphia Member of the American Laryngological Rhinological and Otological Society etc

PHILADELPHIA

It is now generally recognized that affections of the nasal accessory sinuses are more common than they were formerly supposed to be Many physicians still hold the opinion however, that neither their frequency nor import are as yet fully appreciated By careful examination many a case of supposed rhinitis will be found to be associated with, and dependent upon, a chronic, or acute, sinusitis This is particularly the case in the condition known as purulent rhinitis in children, where the sinusitis is the rule rather than the exception Moreover the proper treatment of the sinus disease will result in great amelioration, if not complete cure, of the so-called purulent rhinitis If it be true that a chronic purulent rhinitis is due to, and maintained by, a chronic sinusitis, and if we accept the view that atrophic rhinitis is a sequel of chronic purulent rhinitis, then it is evident that we must consider chronic sinusitis a very important factor in the etiology of chronic atrophic rhinitis Certain it is that careful examination will reveal the presence of chronic sinusitis in a very large percentage of the cases of atrophic rhinitis, and equally certain is it that in order to get relief from the atrophic rhinitis in such cases, we must first cure the sinusitis Indeed, even in those cases of atrophic rhinitis that do not seem to be associated with chronic sinusitis it is very probable that a sinusitis was present earlier in the progress of the case, but had gradually subsided and disappeared Nasal polyps will often be found associated with chronic sinusitis, and we find it frequently necessary to treat the sinuses after removal of the polyps, for we can almost certainly predict that, without such after-treatment, a return of the polyps will occur The pathologic changes that take place in the unobstructed nostril, in cases of deviation of the septum—which I have described in another paper[1]—frequently lead to sinusitis A deviated septum will also frequently cause a chronic sinusitis on the obstructed side All cases of deviated septum therefore, should be carefully examined for existing sinusitis, and if this condition is present it should be relieved either before or after operation for the deviation It is a good rule of practice, in all cases of obstructive or septic conditions of the nasal chambers, to suspect and carefully examine for existing sinus-disease

There is one class of chronic sinus affections which I desire to mention more particularly, for as yet but little attention has been called to them These are cases where the nasal outlets of the sinuses have become obstructed not by gross pathologic lesions such as polyps, deviated septum, etc, but rather by swelling and thickening of the mucous membrane at the nasal openings of the sinuses, or again by small masses of granulations, or even by inspissated mucus obstructing the openings This class of cases closely corresponds to cases of closure of the Eustachian tube from similar causes, indeed, in a certain sense the tympanum, or middle ear, may be considered an accessory sinus, with the Eustachian tube its rather long drainage-tube The obstruction to the openings of the sinuses in this class of cases may be a complete and fairly permanent one, or the openings may be open at times but becoming obstructed by slight causes, such as coryza Within the past few years many such cases appearing subsequent to attacks of influenza have been observed

When the nasal openings of the sinuses are closed, either temporarily or more or less permanently, in the manner just described certain pathologic changes will take place in the mucous membrane lining the obstructed sinus In some instances, these pathologic changes lead to inflammation, with its usual course, resulting in suppurative sinusitis with the common symptoms of this condition In other instances, a chronic congestion of the membrane seems to be the result I am also of the opinion that retention of gases in the obstructed sinuses is present in some cases, and, in others, that the air in the closed sinuses becomes rarefied, thus causing a chronic congestion of the lining of mucous membrane

The diagnosis of this class of cases is greatly aided by the subjective symptoms, pain in the head being the most prominent one This pain may be described as one that is more or less continuous frequently worse upon arising from bed in the morning, wearing off somewhat during the day, a headache that is usually increased by leaning forward, or stooping—usually described by the patient as dull or boring in character, one that is usually increased by colds in the head, that frequently is made worse by exposure to cold winds, etc, that is frequently present even during sleep—a pain that is accompanied by a sense of heat in the face or forehead This feeling of heat is particularly felt when the patient is agitated During the summer season, or in clear weather, or when living an open-air life, this pain is often ameliorated In winter, cold and chilly weather or when the patient is run down in health, it is usually more severe The situation of the pain varies with the particular sinus affected If the frontal sinus alone is involved, the pain is felt in the forehead or over the eyes If the anterior ethmoidal sinuses, the pain is usually located at the root of the nose, near the inner angle of the eye, or is felt deeper, apparently back of the inner portion of the eyeballs If the posterior ethmoidal cells are at fault, the pain is usually referred to the temporal region at times also to the vertex, or back of the eyeballs It has seemed to me that pain from affection of the sphenoidal sinuses is frequently felt in the back of the head As it is not infrequent for several of the sinuses to be affected at the same time the pain may be referred to several of the regions mentioned It may be said, however that the pain in these sinus affections is nearly always a localized one, although several localities may be implicated at the same time The patient occasionally complains of the head paining as a whole In some cases the pain is unilateral resembling migraine one entire side of the head being involved and quite usually, when this is the case, it is always the same side that pains In some cases when

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1 Read at the Sixth Annual Meeting of the American Laryngological Rhinological and Otological Society Philadelphia Pa June 1 1900

the obstruction to the sinuses is not permanent, the patient may be entirely free from pain in the head at times, and may remain so for a longer or shorter interval, but should the patient "catch a cold" in the head, the pain returns, located in the same places as those in which it was previously felt It may then continue permanently, or be repeated at longer or shorter intervals The diagnosis is aided by the fact that pressure over the affected sinus—particularly when the frontal or anterior ethmoidal sinuses are involved—will usually elicit tenderness and pain

Inspection of the nares will frequently reveal an obstructive lesion, such as deviated septum, polyp, enlarged turbinals etc At times a thickening or slight curvature of the superior anterior portion of the bony septum is the only obstructive condition to be observed This produces, however, sufficient narrowing of the upper portion of the nasal chambers to cause blocking of the sinuses, whenever the soft tissues are swollen Not infrequently a tenacious, whitish muco-pus, or seropurulent discharge, may be extracted in long, thin threads Discharge, however, may be entirely absent in many cases and some of these may suffer from the most severe and persistent pain in the head Transillumination is at times a valuable aid to the diagnosis, but is not always a reliable one

In the treatment of acute or chronic inflammation of the nasal accessory sinuses, attention must be given 1, to providing proper drainage to the affected sinus, 2, to the proper treatment to the disordered lining membrane In order to carry out such treatment, various surgical procedures are in many cases found to be necessary It is not my purpose, however, to discuss the operative and medical treatment at this time, but I desire merely to draw attention to the great importance and desirability of opening the natural outlets to the sinuses whenever possible, and this I would advocate even when we have found it necessary to do the so-called radical operations When we succeed in getting a natural outlet open it is naturally inclined to stay open, whereas, all artificial openings tend to close very quickly Many of the milder chronic cases of sinusitis—and nearly all of the acute cases—are capable of being quickly cured, if the natural nasal openings of the affected sinus are opened and kept open, and appropriate local and general treatment instituted In order to obtain this opening and drainage through the natural outlets of the sinuses, all intranasal obstructions of the openings of the sinuses should be removed Obstructive deviations, or spurs of the septum, should be corrected, enlarged middle turbinals should be reduced in size, frequently the amputation of the anterior portion of the middle turbinal is necessary Polyps should be thoroughly removed by evulsion At times, small polyps situated high up in the nares, are found to cause the obstruction Masses of granulations choking the sinus openings are to be treated in a similar manner

Finally, I desire to draw attention to the excellent results obtained from forcibly syringing the openings and sinuses with hot dry air used under pressure In a large number of cases I have been able by such use of hot dry air to open obstructed sinuses very quickly, giving the patient great and, in many instances quick and permanent relief from pain, immediately increasing the drainage and removing the retained secretions

I first drew attention to the hot-air syringe, which I employ and the method to be employed in its use, in a paper[2] presented to this Section at Philadelphia in 1897 Subsequently I have published other results with further description of the process[3] The air is used as hot as the patient can bear it The nasal chambers are thoroughly cocainized, and at times the cocain applications are to be followed by the use of the aqueous solutions of the suprarenal capsule On account of the small size of the tube, an air pressure of from 30 to 40 pounds is usually needed, and the hot air is applied to the openings and forced directly into the sinuses At times a small catheter aids in accomplishing this purpose Acute sinusitis treated in this way, aided by hot water applications externally, low diet, purgation, attention to the digestion, etc, will usually yield in a few days The milder cases of chronic sinusitis likewise yield readily, and in the particular class of cases of partial or complete closure of the outlets, which I have described, and when uncomplicated with sepsis of the sinus, the relief is obtained very speedily, although the symptoms may have been present for months or years

2 JOURNAL A M A, Oct 2, 1897

3 Phila Med Jour, May 7, 1898 also Sept 9 1899

THE REDUCTION OF TEMPERATURE IN FEVERS BY EVAPORATION BATHS, WARM WATER BEING USED FOR BATHS

FRANCIS H WILLIAMS, M D
BOSTON

The method of using cold in fevers described below is the same which I presented at a meeting of the American Association of Physicians in 1895[1] Since that time I have given some hundreds of baths by this method, chiefly in typhoid fever and the results have been so good that I desire to take up the subject again

I shall not attempt any detailed presentation of the cases in which this method of reducing the temperature was employed, but merely indicate the principles upon which its successful use depends, for if these are clearly understood, and the directions carefully followed, satisfactory results will ensue It is necessary that the physician should demonstrate to the nurse exactly what is required to be done, if after this demonstration the reduction in the temperature is not on an average of 2 degrees for each bath, there has probably been some failure to fulfil the conditions essential for success

Cold as an Antipyretic—It is universally agreed that cold is our best and safest antipyretic, but the method of applying it by a cold bath taxes the strength of the patient, the lack of conveniences in ordinary practice for such a bath, and of persons who know how they should be given, as well as the objections made by the patient and friends, are obstacles to its use

Temperature Reduced by Evaporation—My purpose is to show how the temperature can be reduced by the use of cold by a more comfortable method than the cold bath The essential points are that the body be covered by a layer of thin gauze on which warm water is sprinkled, the temperature of the body is reduced by the evaporation of the water, and this evaporation and cooling are promoted by a current of air

The rapidity of the cooling depends to a considerable extent upon the dryness of the air and the volume of it at our disposal In Boston for example, during the season when the houses are heated, the percentage of moisture indoors is low, and during the summer months, though the percentage of moisture may be two or three times as much as during the winter months, by means

1 A More Comfortable Way of Using Cold in Fevers Trans Am Assn of Physicians, 1895

of open windows the volume of air at our disposal is large Either a smaller volume of dry air or a larger quantity of more moist air will serve the purpose, as the quantity of water the air has to take up in the use of this method is not large, and its absorptive power is required only at intervals The doors of the room should be open, and in warm weather also the windows Exceedingly favorable conditions would be found in dry, warm climates

Principles of the Method Tested by Experiment—To gain some idea of the efficiency of this method of cooling and the best way to employ it, I took a large bottle holding rather more than a gallon of water, the temperature of which was 104 F[2] The bottle was wrapped with surgical gauze—having about sixteen threads to the inch—which was sprinkled with water at the temperature of the room at short intervals, and fanned continuously by an electric fan In this way the reduction in the temperature of the water in the bottle during half an hour could be ascertained under varying conditions From such experiments—they do not represent all of the conditions present in the body—it was found that the water in the bottle could be cooled about 28 F below its initial temperature of 104 F in one-half hour, the temperature of the air in the room being 70 F This method is similar to the one which has been used for many centuries in hot, dry climates to cool drinking-water

Number of Layers of Gauze—I also varied the number of thicknesses of gauze covering the bottle, and found that one or two thicknesses of gauze gave better results than several, four or six for instance It is of importance to have the covering for the surface to be cooled a suitable one, something which will hold a thin layer of water on the surface without keeping it warm The gauze serves this purpose and likewise increases the amount of surface from which evaporation takes place

Amount of Evaporation Produced with and without Fanning, Electric Fan and Hand Fan Compared—I found that the reduction in temperature was much greater if the wet gauze were fanned than when evaporation took place unaided by this process I likewise compared the amount of the cooling of the water in the gauze-covered bottle which took place when an electric fan was used to create a draft, with that obtained by hand-fanning, in the latter case two palm-leaf fans tied together to stiffen each other were used I found that, under the same conditions the temperature of the water in the bottle was lowered much less in half an hour by the hand-fanning than by the electric fan In private practice it is quite feasible to use a hand fan, but in a hospital ward an electric one is better, as to fan several patients a number of times a day would tire the arm of an attendant

Ice Water Compared with Warm Water—The use of ice water to moisten the gauze suggested itself to me I therefore placed two of the gauze-covered bottles in the same current of air, one of them being kept wet with water at 100 F, the other with ice water (32 F) and at the end of half an hour the difference in temperature of the water in the bottles was only 1 degree, a difference of about 5 per cent This experiment was repeated, using the cold water on the bottle which had previously had warm water, with the same result This slight increase in cooling by sprinkling the patient with cold instead of warm water does not offset the discomfort of shock which not cold water only, but even cool water gives and of which patients complain By using warm water to moisten the gauze, and continuing the current of air one or two minutes longer, we can readily obtain fully as much cooling as when cold water is used for the slightly shorter period If for any reason this shock to the nervous system is desired, cool water may be used

Use of Alcohol—I also tried moistening the gauze with alcohol—95 per cent—instead of water, and found that the temperature of the water in the bottle was not much more reduced in half an hour than it had been when water was used on the gauze, the difference between the two was about 10 per cent This did not seem to me sufficient to offset the inconvenience of alcohol, as much more alcohol would have to be evaporated to obtain the same amount of cooling, the latent heat of water being much greater than that of alcohol, which is inflammable and expensive, leaves a stuffy odor in the room and may irritate the skin

The principle underlying this method is made more evident when we consider that the cooling which takes place when 5 c c—one teaspoonful—of water are evaporated at 104 F represents roughly the reduction in temperature of a quart of water cooled from 104 F to 99 F, or the cooling of more than a gallon of water 1 F The heat taken to evaporate a pint of water is sufficient to cool 289 pounds of water about 4 F

Test to Determine whether the Heat was Withdrawn from the Water in the Bottle or Air of the Room—To ascertain whether the heat which evaporated the water was withdrawn from the air of the room, which was usually about 70 F, or from the body of warm water in the bottle, the amount of water which was evaporated in half an hour from the surface of a large bottle covered with gauze, when fanned, was measured, and it was found by calculation that the amount of heat lost by the water in the bottle was due chiefly to the evaporation of the water sprinkled on the bottle For example, it was demonstrated, in one experiment, that 4000 c c of water—the amount contained in the bottle—at 104 F were cooled 22 5 degrees in half an hour, and that 108 c c of water were evaporated Standing in the room, a similar bottle of water lost 4 5 degrees To lower the temperature of 4000 c c of water 18 degrees requires the evaporation of 70 c c of water, as not more than 108 c c of water were evaporated in all, it is evident that most of the heat needed to evaporate the 108 c c came from the warm water in the bottle and not from the air

Effect of Warm Water on the Body—By first cooling the outer layer of the body for a few minutes, by the evaporation of water warmer than the patient—about 115 F—and then momentarily warming the surface thus cooled by sprinkling again with warm water, we may draw the blood to the surface and send it back cooler to the interior of the body, and thus by the alternate dilatation and contraction of the superficial blood-vessels, we may accomplish more reduction in temperature than by continuous cooling of the skin That is, physiologically, there are advantages in moistening the gauze on a patient from time to time with water warmer than the patient, rather than with cool water, which would not be apparent in a simple physical experiment To cool a fever patient by applying warm water rather than cold seems paradoxical, but it is the better way, and is more acceptable to the patient

Brandy or whisky administered before giving the bath would promote the dilatation of the superficial blood-vessels

2 The experiments were also repeated on a larger scale using copper cylinders instead of bottles, with good results

Method of Giving Bath—A rubber cloth or woolen blanket is put under the patient, strips of coarse gauze such as is used for surgical dressings are then placed on him, of sizes suitable to go fully three-fourths around each leg and arm, and the trunk, when moistened they should cling closely to the skin There should be only one thickness of gauze This is sprinkled with water[3] at a temperature of 110 to 115 F, sufficiently often to keep the gauze wet, and the patient is fanned

Duration of Bath—It is well to begin with a bath of sufficient duration to evaporate a pint of water, and in subsequent baths to be guided, as to the amount of water to be used, by the effect of the previous one In the later stages of typhoid fever one should remember that the same patient is more susceptible to the action of cold than he was in the earlier stage

Amount of Water Evaporated a Guide rather than the Time taken—The time required for evaporation varies with the amount of moisture in the air If one pint of water is evaporated in one-quarter of an hour, the patient's temperature will fall about so many degrees, but if there happens to be a high percentage of moisture in the air of the room a longer time is required to evaporate the same amount of water say one-half hour, and there would not be quite so much lowering of the patient's temperature as when the evaporation occurs in the shorter time Therefore it is better to be guided by the quantity of water evaporated rather than by the time

Number of Degrees the Temperature may be Reduced—The amount of heat withdrawn from the patient may be varied by increasing the duration or frequency of the baths

Average Reduction of Temperature in Twenty-two Hand-fanned Evaporation Baths—The average reduction in temperature of twenty-two baths by hand-fanning, given to patients with typhoid fever during July, 1893, was 2 6 degrees, the time required for each bath varied from fifteen minutes to one-half hour, and the amount of water evaporated was about one quart—at times much less, sometimes more The temperature was taken in the mouth, and the lowest was sometimes not reached for one or even two hours after the bath once the temperature fell 4 degrees, and once 5 The amount of moisture in the air while these baths were given was probably not far from 70 per cent These baths are not so mild in their effects as to permit one to disregard the possibility of partial collapse in very weak patients, if pushed too far

I have used this method in typhoid fever and pneumonia, the patients had less delirium and slept better, and it seems to me to combine safety comfort, convenience and efficiency to a greater extent than other means of reducing temperature in cases of fever

The following case illustrates the use of the evaporation bath A B, a strong man who had typhoid fever, with a temperature frequently above 103 during three weeks, was given the baths, with hand-fanning, two or three times a day, or whenever the temperature reached 103 F Each bath was continued about one-half hour, and about one quart of water was evaporated at each bath The average reduction in temperature of ten baths was 2 2 degrees Twice during the period when these ten baths were given, a cold tub-bath—65 F—was given for fifteen minutes to the same patient, in place of the other bath, in one of the cold baths the temperature was reduced 3 1 degrees in the second 2 6, an average of 2 8 degrees The temperature may be reduced by the evaporation bath as much as by the cold tub-bath by increasing the number of evaporation baths given per day

Evaporation Bath Compared with Sponge Bath—In order to have some suggestion of the respective efficiency of the evaporation and sponge bath, I made the test described below The sponge baths were given in the following way The patient having been suitably arranged on a rubber sheet, a large sponge was dipped into a pail of water at 70 F, the excess of water squeezed out and the patient sponged, the sponge was then squeezed out into an empty pail, dipped in a basin containing ice-water, to cool it, and squeezed out then again dipped into water at 70 F, and applied to the patient This makes a very good sponge-bath Both kinds of baths were kept up for fifteen minutes

For this comparative test I chose one ward during a service at the Boston City Hospital, and had one-half the typhoid patients who were admitted to it during five weeks in the summer of 1893, sponged, as detailed above, and the other half treated by covering three-quarters of the body with a layer of gauze moistened at intervals by sprinkling with warm water, and fanned as already described The patients were taken alternately There were eight patients in all, four treated in each manner, each receiving a number of baths I did not pursue the comparison on a large number of patients, as they had to be fanned by hand—if electric fans are used it would be less irksome for the attendants in a ward to give these baths than to give sponge-baths The directions were to give a bath whenever the axillary temperature of the patient was 103 or over, but 102 would have been a better temperature to select The rectal temperature was taken one-half hour after the bath and on the average the temperature was found to be reduced by the sponge-bath rather less than 5 degree, and by the evaporation bath rather more than 1, and the reduction in temperature continued for a longer period after the latter bath had been given but this comparison is based on too few patients to be exact Now and then the temperature was reduced 2, 3, and in some instances 3 5 degrees by the evaporation bath

To give some still further suggestion of what may be expected when the evaporation baths are used, I give the results in fifteen consecutive cases of typhoid fever, in which 235 hand-fanned baths were given The temperature in each case cited was taken twenty minutes after the bath, the time of bath varied between fifteen and twenty minutes

BATHS PER PATIENT WITH AVERAGE FALL FOR EACH PATIENT

Baths	Temperature Degrees
17	2 56
25	2 70
1	1 40
3	2 20
5	1 53
6	2 36
15	1 70
35	1 80
24	2 74
13	2 10
8	2 20
2	2 90
2	1 65
57	1 70
22	

One patient not included in the above table was

3 I use a No 1—not No 4—Davidson syringe onto which is screwed a small, hard rubber nose about one inch long and one half inch in diameter perforated at the end with a dozen holes each about one sixty fourth of an inch in diameter These tips are made by the Davidson Rubber Company, Boston The gauze should be kept wet, and if the sprinkling is properly done, very little water reaches the blanket on which the patient lies

given two baths one of which lowered the temperature 3 degrees the other caused a fall of 2 8, an average of 2 9 degrees per bath

Summary—The patients numbered 15, and were given 235 baths, there was an average fall of temperature, per bath, of 1 94 degree, 1 53 degree being the lowest average fall per patient, and 2 74 the highest average fall per patient the least fall after a bath was 5 degree, the greatest, 4 8 degrees, the smallest number of baths to one patient was 1 the largest, 57, 5 times the temperature was higher than before the bath—the rise varying from 4 to 8 degree Twice the temperature remained unchanged after the bath, in 1 case the bath had to be stopped on account of a chilly sensation during the process—the same patient had two other baths after both of which she felt very uncomfortable

Directions—Briefly, the directions for giving evaporation baths are these Give a bath whenever the temperature is 102 or 102 5 F Have the patient lie on a blanket during the bath, cover him with one thickness of surgeons gauze, which when moistened shall fit the skin perfectly, and sprinkle the gauze with water at about 115 F Note the amount of water evaporated and be guided by this in giving the bath not by the time required to evaporate the water, the rapidity of evaporation depends largely on the amount of moisture in the air Have as little clothing on the patient as possible, night and day, so long as the temperature is 102 F or more, nothing more than a sheet in private practice the patient may be without covering

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THE STREPTOCOCCUS PYOGENES IN GYNECOLOGICAL DISEASES

G BROWN MILLER, M D
JOHNS HOPKINS HOSPITAL
BALTIMORE, MD

In 1899 I reported 7 cases[1] of pelvic inflammation operated on in the gynecological clinic of the Johns Hopkins Hospital, in which the streptococcus pyogenes was found to be the infecting agent Since the publication of that article, and during my service in the hospital, 4 additional cases have been operated on in which this micro-organism was found to be the cause of the inflammatory process Nine of the 11 cases presented certain features which were indicative of the etiology of the infection The two exceptions were 1, an infected myoma, and the other an abscess localized to the cul-de-sac of Douglas which had probably been secondarily infected from the intestinal canal In 6 of these cases the peritoneal cavity was invaded at the operation and 2 patients, where this occurred, died, probably both from the resulting general streptococcic peritonitis Attention will be called to this in reporting the individual cases In the other 5 the peritoneum was not disturbed and all recovered The high mortality in these cases where the peritoneal cavity was invaded in contradistinction to the almost uniformly favorable results in celiotomies where the gonococcus is the infecting agent, should make the operator careful to distinguish between these two classes of pelvic infections It is not always possible to positively know before operation, whether one will encounter the streptococcus or not, but there are certain definite characteristics of streptococcic pelvic inflammation and it is to emphasize these that I again call attention to these infections

In studying our cases, 9 of the 11 gave definite histories of infection either at labor or miscarriage The 2 exceptions were the case of infected myoma and the one of localized pelvic abscess in Douglas's cul-de-sac, to which attention has been previously called The history is therefore of the utmost importance in making a diagnosis As in the large majority of cases of streptococcic pelvic inflammation the lesion is a parametritis, I will here state the views of some of the more reliable investigators as to the etiology of this disease Rosthorn says that while the gonococcus may invade the tissue beneath the mucosa, from a clinical standpoint one thing can be asserted, that in parametritis the gonococcus is not found Bumm in purulent parametritis, regularly found streptococci, more seldom staphylococci Doleris and Bourges found, in fetid parametral pus two months after the acute symptoms had subsided, the streptococcus and the proteus vulgaris Hartmann and Morax found the streptococcus in 21 cases of purulent parametritis Pfannenstiel, in all such cases operated on by Fritsch, found the streptococcus Kleinknecht, in 5 cases of widespread parametral exudate, found a mixture of bacteria, staphylococcus albus with bacterium coli streptococcus pyogenes and the staphylococcus aureus Jayle found a mixture of the streptococcus with the staphylococcus and the bacterium coli Backer had a case of influenza bacillus infection and Bumm one in which was the Klebs-Loeffler bacillus Rosthorn found the streptococcus pyogenes and the staphylococcus pyogenes albus and aureus The last-named author says at least two-thirds of such cases are of puerperal origin Bernutz, in 104 cases, says 48 were of puerperal, 28 of gonorrheal, 20 of menstrual and 8 of traumatic origin West gives 77 per cent as puerperal, Buschbeck-Ettinger, 74 3 per cent , Grisole, 63 per cent , Biegel, 55 per cent , and Cullingworth 21 out of 22 cases as puerperal

The other causes besides the puerperium, according to Rosthorn, of parametritis are gynecological examinations tents, pessaries, sounds tampons, operations, excesses in venery, masturbation, use of anticonception sponges and pessaries, cold, hematomata which suppurate, suppurating myomata dermoid cysts, echinococcus cysts, inflammation of neighboring organs—paracystitis, paranephritis, paraproctitis, paratyphlitis, caseous bone and suppuration of joints The history should then, in the large majority of cases of streptococcic pelvic inflammation point to a labor or miscarriage as the beginning of the complaint

Of almost equal value with the history is the pelvic examination The pelvic structures present certain characteristics which are almost unmistakeable These are, the situation of the mass, its consistency, and the intimate connection of the uterus to the walls of the pelvis To get a correct idea of the site of the pelvic inflammatory mass of streptococcic origin it is necessary to bear in mind the routes of invasion in these cases In nearly all, the streptococcus invades the surrounding tissues through the lymphatics As shown by the work of Widal, Konig and others, when the extension may also take place through thrombosed vessels, through the circulating blood, or by direct extension as in abscess formation The bacteria occasionally seem to extend along the mucous tract and thus enter the peritoneal cavity This is probably of extremely rare occurrence Only one of our cases indicated this as the route of extension and in this case (Case 4) there was also a lymphatic infection The point of entrance of the streptococcus is usually some abrasion of the mucous membrane of the uterus or vagina or at the site of the adherent placenta The tendency is for the infection

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to follow the layers of connective tissue and fascia of the pelvis, and not to invade the adjacent layers This is admirably set forth by von Rosthorn, in Veit's "Handbuch der Gynakologie" Bearing these facts in mind the situation of the inflammatory mass is what one would expect The bacteria going through the cervix or vagina cause a parametric exudate, abscess, or both

I will not dwell upon the various situations of this parametric exudate further than to state that it lies in the connective tissue surrounding the uterus and vagina and beneath the pelvic peritoneum It is deep-seated, may be situated in either broad ligament, and is usually unilateral It may lie posterior to the uterus in the septum between the peritoneal cavity and the vagina, or extending higher may surround the rectum, or occupy the posterior portion of the pelvis on either side beneath the peritoneum It may be ante-uterine lying between the uterus and bladder, occupy the space of Retzius, or extending, may be situated higher along the anterior abdominal wall Laterally, it may lie in the false pelvis on either side Where the inflammatory process approaches the peritoneal cavity, the omentum, tubes, ovaries, and intestines become adherent and thus tend to protect the general peritoneal cavity from infection We find this the case also where the point of infection is the placental site and a similar protective inflammatory process is usually found when the invasion occurs through the tubes When this protection does not take place a fatal general peritonitis is the result The mass is nearly always asymmetrical One finds a mass on one side of the pelvis and the other side normal to palpation, or a mass anteriorly or posteriorly and the remainder of the pelvic structures uninvolved This asymmetry is in marked contrast to the condition found in gonorrheal infections where the process practically always involves both tubes The superficial situation of the gonorrheal salpingitis in contradistinction to the deep-seated nature of the streptococcic pelvic infection is of the greatest value in distinguishing between the two

The consistency of the mass is of the utmost value in making the diagnosis This consistency is of bone-like hardness While in the early stages of inflammation the exudate is softish, and after abscess formation this denseness may in a degree disappear, yet in the majority of our cases the extreme denseness of the exudate even where there was abscess formation, called our attention to the probable nature of the infection When pus is present it usually consists of a number of small abscesses situated in dense indurated tissue, and the palpation shows the bony consistency before mentioned

When the lesion is a parametritis there is an intimate connection between the uterus and the pelvic wall The immobility of the uterus is marked and the exudate can be felt extending directly from this organ to the pelvic wall The diagnosis then can be made upon the following points 1 the history, 2, the situation of the pelvic mass, 3, the denseness of the mass, 4, the immobility of the uterus and its connection by the exudate to the wall of the pelvis

The streptococcus has, according to the history in some of my reported cases, the faculty of remaining alive and capable of culture a remarkably long time in the infected tissue In one of the cases reported in my first article, the infection apparently occurred twelve years previous to the operation, and in one case reported now there was a definite history of infection two years before admission to the hospital In the first case the micro-organism was capable of being cultivated, and in the second the patient had, following the operation, a general streptococcic peritonitis which resulted fatally In the other cases the micro-organism had remained alive for periods varying from ten days to twelve weeks The two cases mentioned above emphasize the necessity of observing the same precautions against contamination of the general peritoneal cavity in infections of long standing as in those of recent origin

In conclusion I will say a few words as to the operative procedure As soon as the mass can be definitely located the operation should take place The early operation here is as much indicated as in a streptococcic lymphangitis of the arm or other part of the body and for the same reason i e, to prevent the extension of the infection It is unwise to wait for suppuration When this occurs it is generally in the form of small abscesses scattered throughout indurated tissue, and one is consequently quite uncertain in many cases whether or not pus will be found at the operation A free incision should be made extraperitoneally, the mass thoroughly broken up by means of blunt dissection so as to evacuate the abscess cavities, and drainage should be established The location of the incision depends on the situation of the mass If the mass is posterior to the uterus the incision is made in the upper posterior part of the vagina If it occurs between the uterus and bladder, a similar incision anterior to the cervix is made If in the space of Retzius, the incision is made suprapubically In cases where the mass is in the broad ligaments or in the false pelvis the incision depends on whether it is deep-seated or not In the former case a vaginal puncture is made lateral to the cervix, and this is dilated with a blunt instrument and the fingers until the mass is broken up In these cases much care is necessary to avoid injuring the ureter and the uterine vessels When the mass is in the broad ligament and can be reached from above, the incision is made parallel to Poupart's ligament, slightly above it and toward its outer end, and the dissection is carefully made so as not to enter the peritoneal cavity Several of our cases were operated on by the latter incision In one it was thought that the peritoneal cavity had been invaded but an exploratory incision showed this not to be the case and revealed also the interesting fact that the tubes and ovaries were entirely normal If the mass is situated still more superficially and in intimate relation to the abdominal wall, the incision is made immediately over it When the operator is in doubt as to the origin of the infection, that he has thoroughly explored the mass, or there are signs of intestinal involvement, it is better to do an exploratory celiotomy, taking every precaution to avoid contaminating the abdominal cavity or the celiotomy wound As an interesting example of this was a case operated on by me three years ago The diagnosis was an abscess in connection with the anterior abdominal wall immediately above the pubes and of unknown origin The abscess was incised and drained The patient in a few weeks developed symptoms of intestinal obstruction, and died on the table at the second operation It was then seen that the patient had carcinoma of the intestine The carcinomatous mass had become adherent to the abdominal wall and the infection had gone out through the intestine at this point and caused the abscess An exploratory incision would have revealed this condition and a resection of the intestine would have offered the patient a hope of recovery

The cases which follow are well worthy of study as

illustrating the points which I have attempted to bring out in this and the preceding article

CASE 1—R F, white, aged 32 years, was admitted June 14, 1899, complaining of abdominal pain and a mass in the left lower abdomen Her past history was negative, menses regular, painless and profuse—the last period May 17 Married 14 years, she had had five children, the oldest 12 years, the youngest 3 months, and two miscarriages, the last one occurring one year before her last labor

Present Illness Her symptoms began soon after her last confinement She thinks she had no fever nor chills, but was confined to her bed eight weeks with pain and burning at the site of the mass She was nauseated, had no uterine hemorrhage, but anorexia, no urinary symptoms She was constipated Her temperature on admission was 99 F, and pulse 100 She noticed the mass in the left side immediately after confinement

Examination Chest normal, general condition good, abdominal walls flaccid, with a visible mass in the left hypogastrium This mass extended from the pelvis to 2 cm above the umbilicus The mass, on the inner side was soft and cystic, harder toward the pelvic wall There was visible peristalsis in the overlying coil of intestine, and tympanites over the upper and inner portions of the mass The vaginal outlet was relaxed, the cervix in the axis of the pelvis, the os gaping The uterus was low in the pelvis, anteflexed, small and drawn over to the left side of the pelvis The right side of the pelvis was normal to palpation On the left side was a mass the size of an orange, occupying the position of the ovary, which was exquisitely sensitive This mass was slightly movable but intimately connected to a hard indurated mass which apparently formed part of the pelvic wall The latter was as hard as bone and was also extremely sensitive The diagnosis of neoplasm of the ovary was made on this examination (The diagnosis of streptococcic parametritis had been made by me in the dispensary)

Operation (Operator, Dr Stokes) A median abdominal incision was made The peritoneum was normal in appearance, the uterus and right appendages normal, the uterus drawn over to the left side by the left tube which was adherent The end of the tube, the ovary, several coils of intestines, the left broad ligament, and the abdominal wall formed a mass which was as hard as "bone" A coil of small intestine was adherent along the left lateral face of the uterus The tube from its uterine end to where it disappeared into the mass was normal in appearance The gut where adherent was covered with what appeared to be a pyogenic membrane, and its wall was much indurated The intestine was by dissection, separated from the uterus It was now found that the mass was formed by the gut, tube, and ovary being densely adherent to the pelvic wall On separating the adherent gut from the pelvic wall a few drops of pus containing streptococci oozed up The gut was not entirely separated and the ovary was not exposed The pus did not seem to come from the tube Gauze drains were placed over the adherent area and the ends were brought out through the lower angle of the wound and through an opening made into the vagina posterior to the cervix The upper end of the abdominal incision was closed

Following operation the patient's pulse went up to 140 within twenty four hours and on the fourth day reached 160 The temperature rose steadily and reached 103 F, leucocytes, 28,000 Vomiting and extreme restlessness were marked She died on the fourth day The diagnosis was general streptococcic peritonitis At bacteriologic examination (Dr Hunner) cultures showed streptococcus pyogenes

The history of the case, the site of the mass and its hardness should have made the diagnosis sufficiently clear to have caused the extraperitoneal incision by which the mass could have been reached and drained

CASE 2—S H, white aged 31 years, was admitted March 16, 1900, complaining of abdominal pain The past history was negative, the menses normal until her present illness, since the beginning of which they have been quite irregular, ocurring every two or three weeks, with the flow increased in amount Married four years, she has one child aged 2 years Labor was instrumental, with laceration of the perineum She has had no miscarriages

Present Illness This began two weeks after labor, two years previous to her admission to the hospital, the onset gradual with dull aching pain in the left groin, with nausea, chills and fever The abdomen was swollen at times, and at others she noticed a tumor She became nervous, less in weight and strength and suffered from constipation, no urinary disturbance Leucorrhea, variable in amount and non irritating, existed for three months prior to admission Examination of the chest and abdomen was negative, no note of vaginal examination

Operation March 17, 1900 (Operator, Dr Kelly), an abdominal (median) incision exposed a mass at the left pelvic brim adherent to the sigmoid and left round ligament On freeing these, the mass was found densely adherent to the pelvic wall, broad ligament and side of the uterus The latter lay on the pelvic floor posterior to the mass The right tube and ovary were normal The uterus was separated from the mass with the escape of a small quantity of pus The entire top of the broad ligament was thickened and infiltrated The tube was not involved The tube and ovary were removed and the round ligament sutured over the raw area In enucleation, a hole 1 cm in diameter was torn in the rectum This was sutured with two rows of catgut sutures Closures of the abdominal wound was without drainage Drawings showed an ovarian abscess The relaxed vaginal outlet was repaired

At 2 p m, March 18, her temperature was 104 F, pulse 120, and leucocytes 22,000 She was slightly nauseated The abdomen was reopened at this time and the peritoneum found slightly injected, the cavity contained a small amount of free fluid The peritoneal cavity was irrigated From this time until March 24, when she died, the patient showed the typical signs of general peritonitis, nausea, distension, constipation, rapid pulse, elevated temperature Autopsy showed general suppurative peritonitis, much necrotic tissue about the seat of the old abscess The sutures of the rectum had given way partially, there being a communication between the gut and abdominal cavity There is no report of the bacteriologic examination at autopsy In the bacteriologic examination at operation (Dr Hunner), cultures and cover slips from pus showed streptococcus pyogenes

Although no note was made of vaginal examination at least two had been made The history, the unilateral situation of the mass, and its induration should have caused a correct diagnosis prior to operation and after the incision had been made it was still possible to have avoided the infection of the general peritoneal cavity While in this case it is impossible to say whether the cause of death was due to the streptococcus or to an infection from the intestine, yet the immediate rise of temperature and the presence of the streptococci capable of culture indicate that this micro-organism caused the original general peritonitis, and that the infection of the catgut sutures with which the gut had been closed had caused the sutures to give way

Immediately following operation an enema of 300 c c of salt solution was given by mistake This may have caused the giving way of the sutures The exploratory operation by Dr Kelly, on the day after the operation, made with this in mind, failed to reveal any defect in the suturing The probability is that the death was caused by a general streptococcic peritonitis complicated by an invasion of bacteria and fecal material from the rectum It is worthy of note that the primary infection, according to the history, was two years prior to admission

CASE 3—F L, white, aged 20 years, was admitted June 10, 1900, complaining of pain in the abdomen Her past history was negative, also menstrual history She was unmarried, had one miscarriage at the sixth month, on May 18, 1900, and leucorrhea for one year, non irritating and non offensive

Present Illness This began with the miscarriage, which was produced by means of a bougie, the fetus expelled on the fourth day, preceded by chills and fever She got up on the fifth day after labor and had been working until May 31, when, after a misstep, she began to have pains in the left ovarian region Since miscarriage she has had a bloody vaginal discharge On May 31 her physician, who was then first called, noticed a swelling the size of an egg in the left side She had night sweats with slight fever, but no chills She felt weak and had lost in strength and weight General condition good color coated tongue, constipated, no fever The urine contained some pus and albumin

Examination Chest negative, abdomen slightly distended and in the left lower quadrant was a tender mass the size of the fist and immovable

Vaginal Examination Uterus in anteflexion, normal in size and fairly movable, the right tube and ovary normal A hard irregular mass was felt in the left broad ligament, giving the characteristic induration of a parametritic exudate The left tube and ovary were thought to be involved A diagnosis of streptococcic parametritis was made in the ward

Operation June 11, 1900 (operator, Dr Cullen), an incision parallel to Poupart's ligament toward its outer end and 2 cm above it was made, with blunt dissection, avoiding entering the peritoneal cavity On reaching the base of the broad ligament an abscess containing two ounces of brownish pus was evacuated, and the indurated tissue explored In doing so it was thought that the peritoneal cavity had been entered, so an exploratory incision was made It was now found that the peritoneal cavity had not been invaded Both tubes and ovaries were normal The abdominal incision was closed and protected, the other incision drained The patient made an uninterrupted recovery, and was discharged perfectly well At the bacteriological examination (Dr Hunner), cultures and cover slips from pus showed the streptococcus pyogenes

The history, the situation the consistency of the mass, and its relation to the uterus and pelvic wall all indicated the nature of the infection, and the correct diagnosis probably saved the patient from a general peritonitis of streptococcic origin

CASE 4 —M K, white, aged 38 years, was admitted Aug 18, 1900, complaining of fever Her family and past histories were negative, her menstrual history also She had been married twenty years, with eight children, two miscarriages, the oldest child 19 years old, the youngest 12 days, but no trouble with any labor or miscarriage until the last labor Leucorrhea was slight, non irritating, and non offensive

Present Illness This began one day after labor, twelve days prior to her admission, with fever—temperature 105 F—and chills The labor was normal, except that the attending physician delivered the secundines With the fever was abdominal distension and griping abdominal pains The distension soon subsided Her general condition on admission showed no abdominal tenderness, the tongue was red and coated, appetite poor, slight nausea, cough, the patient of spare build, and pale, the mucous membrane of a good color

Examination Chest negative, except a few râles at the base of the right lung, abdomen full and soft, and, occupying its middle lower portion, was a rounded mass rising half way to the umbilicus The vaginal outlet was considerably relaxed with slight cystocele and rectocele The fundus of the uterus was represented by a rounded irregular mass lying to the right of the median line and rising half way to the umbilicus The spleen was slightly enlarged She was given hot boric acid douches, was kept in bed and ran an irregular temperature of 99 F to 102 F There was slight distension at times, and she had pains in the left groin Her pulse was 90 to 100 Examination, August 31, showed marked tenderness in the left inguinal region, and palpation showed a small mass here September 3, irregular masses were felt on both sides of the uterus She at this date had a temperature of 103 F, and a leucocytosis of 48,000

Operation Sept 6, 1900 (operator, Dr Hunner), a median long incision was made, and the peritoneum found much congested and thickened The omentum was plastered over the sigmoid, which was in turn firmly adherent to the left tube and ovary The omentum was easily detached The sigmoid was freed with considerable care and difficulty Pus escaped from the left tube as the sigmoid was detached The right tube was a pyosalpinx The uterus, tubes and ovaries were enucleated Three abscesses were found in the left broad ligament, one in its outer portion, another under the round ligament near the inguinal ring, and the third at the uterine base of the broad ligament Each measured 2 to 3 cm in diameter The cervix was split and the pelvis well drained by gauze, some of which emerged from the lower angle of the abdominal wound and the remainder through the cervix The patient made rather a tedious convalescense She developed a pleurisy which finally cleared up and she was discharged Oct 22, 1900, well At the bacteriologic examination, the streptococcus pyogenes was found by microscopic examination, in the abscess, and grown on the various media The same micro organisms were found at various times during the convalescence, in the granulating wound

This patient had in addition to the purulent parametritis a double pyosalpinx, and it is the only one of our patients who showed this condition This rendered a hystero-salpingo-oophorectomy necessary The diagnosis of a streptococcus infection had been made from the history and was partially confirmed by finding the abscesses in the broad ligament Consequently extreme care was used throughout the operation to protect the general peritoneal cavity, and to this and the free drainage the patient owed her recovery

In considering in this article cases of streptococcus infections I have dealt only with those of pelvic inflammation As the large majority of these infections, having their origin in the genitalia of women, occur at labor or miscarriage, the general question of puerperal infections due to this micro-organism belongs more strictly to the obstetrician There are however, a class of cases which belong strictly to gynecology, and to these I have confined my attention Since the introduction of aseptic midwifery cases of parametritis have become comparatively rare, yet every obstetrician and gynecologist will occasionally meet with this affection Certainly the large majority of them are due to the streptococcus pyogenes, which micro-organism has, however, the faculty of causing lesions in the pelvis which can not be classed under this head Again, not all cases of parametritis are due to the streptococcus I have endeavored then to call attention to the characteristic signs by which the diagnosis of streptococcic pelvic infections which have extended beyond the uterus and which have not caused a general peritonitis or systemic infection can be made, and to the principles of operation

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MENIERE'S DISEASE WITH REPORT OF A CASE

R A BACHMANN, M D
GOOD SAMARITAN HOSPITAL
PORTLAND, ORE

In 1861 Ménière published, in the *Gazette Medicale de Paris*, a description of a group of symptoms which thereafter, when noted received the name of Ménière's disease The symptoms in general were progressive deafness, varyingly constant vertigo, tinnitus aurium and gastric disturbances Since then cases have been reported at times on both sides of the Atlantic, but principally in Europe, and pathologic investigations have been made The result, however, has been more or less discordant, principally in admission of a distinct disease with symptoms as described, and additionally in the exact nature and location of the lesion or lesions

Thus Burnett[1] denounces the name of Ménière's disease as unjust and unscientific defending his assertions by the fact that Flourens, in 1822, and Deleau,[2] in 1836, described aural vertigo more accurately than Ménière in 1861, Deleau being especially entitled to credit, as he located the disease in the middle ear Furthermore, he says that the lesion in cases of aural vertigo with tinnitus and deafness has been found in his experience to be in the middle ear and relieved by removal of the incus and stapes Again Eckert,[3] in summing up his conclusions based on cases published up to the time of his writing, leans to the idea that the lesion is located mainly in the semicircular canals and depends principally upon a diseased state of the terminal apparatus of the acoustic nerve Hughlings Jackson[4] has found that hemorrhage frequently causes the symptoms Ferrier[5] believes that the lesion is irritative and located in one or more of the semicircular canals, the direction of the falls during an attack depending on the canal affected Buzzard,[6] on the other hand, thinks that the paroxysmal nature of the vertigo precludes

the probability of any structural lesion in the canals Knapp[7] regards the deafness for musical sounds in some cases as proof that the disease extends to the cochlea

Regarding Burnett, it is apparent that he has confused —and the confusion is shared by many—the deafness, tinnitus and vertigo so often seen in cases of chronic middle ear affections, with the clear, orderly, typical train of symptoms in Ménières disease And the men to whom he would award the palm of priority have simply described these symptoms and not those properly classified under the name of Ménière's disease The investigations of the other men mentioned, together with the more modern researches, point unmistakably to the labyrinth as the seat of the lesion irrespective of what part of the labyrinth may be involved

That the semicircular canals are involved seems from their physiology to be reasonably certain They are essential in the function of equilibration The pressure of the endolymph upon the terminals of the auditory nerve produces an irritation of its filaments, the impression being transmitted from there by the nerves to their centers If pressure be made on the round window, dizziness and an inclination to fall backward are produced by the transmitted pressure upon the ampulla of the posterior canal Pressure upon the footplate of the stapes produces a rocking of the head from side to side through pressure transmitted to the superior canal and ampulla The horizontal canal, owing to its location, can not have pressure exerted upon it When strong pressure is made upon the fluid within the vestibule, simple vertigo results

These physiologic facts easily account for the dizziness and tinnitus in middle ear affections, immobilizing the stapes in the round window either by direct impaction of the foot-plate or by pressure upon it from the incus However, that this impression made upon the end filaments of the nerve by pressure, can not also be caused by a changed state of the filaments themselves is altogether untenable and not supported by pathologic investigation nor clinical facts

Burnett[8] has recently again reported the results of twenty-seven operations for removal of the stapes, which in every case gave relief The cases being, as surmised of his previous ones, not true Meniere's disease, but probably otitis media, purulent and non-purulent forms

Etiology—Regarding the etiology of true Menière's disease, age above 30 and the male sex seem to be factors Syphilis and the rheumatic diathesis are probably the most frequent direct causes Exposure, senile changes, blood changes as leukemia[9] and simple anemia, hemorrhages, traumatic[10] or idiopathic serous effusions,[11] cerebral disturbances,[12] parotitis and influenza frequently factor directly in the causation This list necessarily forecasts the pathology which is chiefly inflammatory with or without hemorrhages but, as far as can be learned, without the formation of pus There is much obscurity as to the pathology and more work must be done to clear it up

Symptomatology—The symptoms are grouped about four cardinals, viz, vertigo, tinnitus aurium, progressive deafness and gastric disturbances Vertigo appears first in the majority of cases concurring in others with the tinnitus and deafness These always follow a parallel course Beginning usually in one ear they increase in severity for a time remit increase again and finally subside partially while the other side becomes affected The tinnitus gradually grows worse till it finally ceases in one ear and then in the other, complete deafness marking its cessation

The deafness and tinnitus may be bilateral and appear suddenly, as illustrated in the classic case of Ménière, where a young girl having exposed herself during menstruation was seized suddenly with vomiting, vertigo, bilateral deafness and tinnitus, and died on the fifth day, the autopsy revealing a serous hemorrhagic fluid in the semicircular canals

The vertigo begins usually with slight and transient attacks having a tendency to progress in severity, but following no definite interval in their recurrence, excepting that in the later stages the intervals are shortened They may vary from one attack a month to four or five a day Seemingly they are aggravated by overwork, sudden movements of the head, turning in bed, blowing of the nose, indiscretion in diet, constipation, excitement and changes in the weather In character they show a great diversity in the same individual as well as in different cases They may begin with a sensation of rotation or slanting of the head There is a tendency to walk toward the side affected or fall toward that side in the paroxysm Often the vertigo is a simple swimming of the head which may be subjective or objective Subjective if the patient feels himself turning, objective if his surroundings revolve about him During a paroxysm the vertigo increases, the tinnitus becomes loud and roaring or shrieking The patient begins to fall and seeks support until the sensations abate Consciousness is usually present in the attack and voices can be distinguished and understood In the severer attacks consciousness may be wholly or nearly abolished Total loss of consciousness is rare

The onset duration and course of the symptoms are in a great measure dependent on the etiology Systemic influences produce a long course with gradual onset Hemorrhages and traumatism, acute infectious processes and some forms of rapid syphilis produce a more or less sudden with a subsequent shorter course

Gastric disturbances manifest themselves during the attack of vertigo There is a feeling of wretchedness and nausea which ends in vomiting very much like an ordinary bilious attack During the interval the stomach appears well in most cases, but a tendency to constipation is marked and presents an important consideration in the successful treatment of the disease

Besides these symptoms, nystagmus, volitional tremor, loss of memory and weakness of the extremities are also noted Nystagmus has been observed by Hughlings Jackson, Gruber and Jacobson It is present with the nervous symptoms Loss of memory and weakness are most marked in senile and rheumatic cases

Recognition of the Affection—The disease, owing to its anatomical location is not well understood at the present time Enough of evidence, however, is in to justify the opinion that Meniere's is a disease by itself, although rarer than supposed Aural vertigo is a general term of which Ménière's disease is a particular form It is a disease involving the terminal filaments of the acoustic nerve in the labyrinth, and follows a definite course tending to end in deafness Pathologic changes in the middle ear may cause, in part, similar symptoms having, however, dissimilar sequence, course termination and pathology Besides this, Ménière's disease yields to non-surgical treatment in most of those cases in which the cause is ascertainable

To differentiate it from middle ear disease with vertigo it should be remembered that this affection in its purulent form is accompanied by a discharge has visible

lesions and a differentiating history Besides this the tests of Gelle and Bing may aid in diagnosis From epilepsy the incomplete loss of consciousness, the continuing of vertigo after the paroxysm and the loss of hearing make Ménière s disease easily distinguishable

CASE —In August, 1900, I was called to see Fernando M, aged 67 who was suffering from a so-called bilious attack In attending him his relatives related the occurrence of similar attacks and gave me a partial history of apoplexy Being dissatisfied with the correctness of the diagnosis I was requested to call and make an examination, which I did the following day By that time the patient had entirely recovered from his attack, appeared well nourished, had good color and, as he stated, an excellent appetite I solicited the following history Twelve years ago he was taken sick with a rheumatic attack which recurred frequently until six years ago when, during one of these attacks, he had an apoplectic stroke, or an attack diagnosed as such at the time. The attack consisted of a sudden and almost complete loss of consciousness which came on while he was sitting at the table eating supper Dizziness ushered in the attack and noises in the ear were loud No paralysis followed, and in two days he practically recovered, save for an inability to use his tongue as heretofore, it seeming thick and difficult to move, though mobility was possible Sense of taste was not impaired The tongue symptom gradually disappeared, but a year later he noticed a sensation of cold from his hips down, on both sides His rheumatic attacks were located chiefly in the great toes of both feet and now there was a dull heavy sensation near the insertion of the gluteal muscles, which became more pronounced after walking or other exertion Preceding this attack he had what he termed a nervous spell consisting of a general prostration during which he cried very much without cause, after this his feelings were greatly relieved Similar emotional disturbances occur at the present time Jokes and stories calculated to arouse his risibilities have just the opposite effect, and the very best humorous efforts of his friends have been followed with a profusion of tears

Another rheumatic attack followed soon after, again located in the great toe The patient continued with a sensation of cold and pain in the right hip, until two years ago when he had the first attack of vomiting very similar to the one which I saw Up to the present time he has had only two other attacks of vomiting But at least once a month attacks of nightmare with partial unconsciousness occur, during which he sees various scenes of past life and from which it is difficult to arouse him

The ear symptoms proper began three years ago, when he noticed a swelling and hyperesthesia about the tragus of the left ear When he would touch this area a tingling sensation coursed over the skin and through the deeper structures, setting up a dizziness which causes him to fall unless supported This sensation gradually diminished until it is now nearly absent It never appeared on the right side Eight months ago deafness and tinnitus first began in the left ear There was never any discharge No lesions are visible Four months later the right ear became affected, the left getting better at the same time The tinnitus was then confined to both sides, simulating the shrieking of a steam whistle, at other times the rushing of a swift stream about some obstacle, again, in listening for the ticking of a watch an imaginary ticking would be heard all day Constipation was marked He complained of his legs being cold and kept them wrapped with blankets which at times seemed insufficient in quadruple thickness Weakness and vertigo prevented him from walking more than thirty yards at a time, when he would rest, after which a similar distance could be traversed An inability to write began five years ago It consisted of a volitional tremor, becoming coarser and more violent with increased effort When at rest the hand is perfectly quiet The left hand is unaffected and serves the offices of the right His reflexes are normal This was the condition of the patient August 24 On the 26th he was placed on potassium bromid and hyoscin hydrobromate, 7 and 1/200 grains respectively three time daily He continued this treatment until the end of September without any beneficial results, and was then placed on salicylic acid and potassium acetate, 10 and 5 grains respectively three times daily From that time on he gradually improved The improvement showed itself in the cessation of the tinnitus in the left ear, with marked improvement in the hearing of the same ear The right ear, which at the beginning of treatment was totally deaf to the ticking of a watch, has heard this sound twice within the last week and the tinnitus in that ear has abated and changed location being situated higher up near the anterior portion of the parietal bone

No vomiting has occurred, and last week the patient was able to walk to my office and return to his home without discomfort and without a showing of vertigo This distance one way is about one hundred and fifty yards

Pilocarpin injections were used a week after the beginning of the salicylate treatment, but were abandoned on account of the great discomfort and little benefit they caused

The patient, though improved, is not wholly cured, but the indications for a favorable progression are very good The result will be subject to another report

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THE FINANCIAL RELATIONS OF THE MEDICAL PROFESSION TO THE PEOPLE AND PUBLIC *

J J CONNER, M D
PANA, ILL

Medical men show more financial failures, when judged from a commercial point of view, than any other class, but this is not because the members of the medical profession are incompetent men, or do not earn a living, but because they have inherited a faulty system of doing business Years ago, when the good old family doctor was in vogue, of which Ian Maclaren's "Willum M'Clure" is the type, the physician did not expect to lay up a store for his old age or the comfort of his family but when his life's work was done, to be laid to rest by his neighbors

* Read before the Semi annual Meeting of the District Medical Society of Central Illinois, held in Pana, Oct 30, 1900

The time has come for a radical change in our methods In the days before the rapid shifting of the population the shiftless methods of our fathers may have worked well enough but now, when such frequent changes are taking place in the abode of our patrons, and ideal, honest manhood is so scarce, we are necessarily obliged to look more carefully after the collection of our accounts But how many have any regularity about presenting these? How many refuse to treat the well-known deadbeats? It is easy to find those who say they do not treat this kind of people, but their goodness of heart, or some other cause induces them to render them the desired service, for many are afraid to say "no" to these people for fear of hurting the feelings of some of their friends or relatives who may have given patronage in the past or who might otherwise do so in the future This does not apply to the worthy poor, and I would not close my eyes to appeals for help in times of distress, for physicians must treat this class found in every neighborhood Christ said "The poor ye have with you always," and I am not trying to fortify your hearts against such Boerhaave said the poor were his best paying patrons, for God paid him for treating them It has also been said that no medical man ever rose to eminence in the profession who refused attendance on the worthy and honest poor

My desire is that a free and full discussion may be had on the following points 1 There should be a better fraternal spirit in our dealings and associations with one another, so that we will consider ourselves friends and not rivals in medical practice 2 A uniform fee-bill should be established, and this should be rigidly lived up to 3 Companies and corporations should guarantee payment of bills rendered for services to their employees when injured while at work for them 4 We should demand of the public authorities a just recognition in public affairs and a just compensation for our services

The members of the medical profession have been imposed on both by the people at large and by the public authorities, and are not receiving the just remuneration for services or the due respect from the public that they deserve But the members themselves are almost wholly to blame for this state of affairs If we had more of the spirit of Dumas' famous three guardsmen we would be far better off, i e, "One for all and all for one" We should make ourselves felt as a united body, demanding our rights as one man in the voice of the whole profession when we ask for anything of our lawmakers or of others If we would make ourselves heard by united effort we could have almost anything we might ask for that is reasonable Our inharmonious condition is due to lack of organization, and in consequence the profession does not receive that respect which it would if its members were well organized into an association controlled for the benefit of the whole, and in working for the profession at large each individual member would be helped financially and elevated to a higher plane of usefulness As to our present condition, it is very little better now than it was many years ago, but who is to blame for it but ourselves? Every walk of life but that of medicine is represented in the names recently chosen for the Hall of Fame Then let us consider this omission of the names of the great benefactors of the whole human race, like Morton, the discoverer of anesthesia, and McDowell the great pioneer of abdominal surgery, and of Sims, the immortal gynecologist, ask ourselves the reason for it The answer is Because we are not united in a harmonious body and so accomplish little or nothing, while we continue to wonder why we are not recognized according to worth as other men progress

The physicians of every community should organize an association for mutual protection, and each individual physician in that place who is recognized by the state board of health should be a member Then the first thing should be the establishing of a fee-bill to govern the charges in that community, and next a list of the dead-beats should be made for the information of members The fee-bill should be the standard for all charges, and when a charge is made it should be the one agreed on If attendance is rendered the worthy poor, it may be for charity, but let the charges be made in good faith and lived up to A fee-bill would be of inestimable help in settling with the chronic hagglers and would soon educate the community as to what a fair charge is

Another cause of complaint on the part of physicians is the habit of companies and corporations employing laborers who are often injured while at work, and expecting to have them treated by physicians who are given no assurance of pay by the firms employing the men The employee is severely injured and laid up at home with increased household expenses consequent on his misfortune, and after he has returned to work he is so in debt that the physician is unable to get anything for months or years, and often never If physicians were properly organized they could compel employers to see that they received their pay, but individually they have not the power to enforce this I have had abundance of sad experience on this line, and have in vain sought redress I also tried to get the local physicians to enter into an agreement to notify the employers, in this place, that we would hold them responsible for our fees in such cases, but some refused to sign In these cases the physician in attendance well knows that it is utterly impossible for the head of the family to pay anything, in fact, he is more conscious of the necessity of giving the distressed family something out of his own scant pocket-book than rendering his bill but the grocer and other creditors who have not seen the hardships of the family push their bills and collect them, while the doctor does not push his, and finally loses the entire amount

Still another cause of complaint is the way that physicians are discriminated against by the public authorities The county boards of supervisors have for years cut the bills sent them by physicians, after being ordered by their respective supervisors and duly sworn to for treating paupers While the patient treated may be a pauper, surely the state is not

Again, when it comes to the settlement of estates physicians' claims are not allowed by county judges until about the last thing After the bills of the tailor the undertaker, etc, are allowed, the physician comes in for his share "for treatment in a last illness" It often happens that a physician treats a patient for weeks and perhaps many months in a last illness, and when the family is convinced that there is no hope of recovery there is a change of doctors in order to get rid of paying the one who has stood by them in their long struggle

About in the same category as the county pauper practice should be placed the new innovation, at least new for the small cities and villages the so-called "club practice" A sick benefit society is formed, as I understand it, in a place, and contract with a physician for a small fee a mere pittance, for stated services, to attend at the beck and call of the members who may need medical service It generally happens that the most of the members of these societies or clubs are the prospective

fathers of soon-to-be-larger families, and desire attendance on their wives for a mere pittance as compared to what would be charged, and ought to be, for taking care of a case of confinement in the regular order of practice

It is now time for the medical profession to form protective associations so as to work together on all the lines which I have mentioned, and the one that I am in favor of forming first is one for the weeding out of dead-beats, and the devising of ways and means for the better collection of our just debts Every kind of employment or profession has an organization for the better protection of its members except that of medicine, but there is a faint ray of hope, for the physicians in one or two cities and a county have begun the work and it is bearing good fruit Physicians in Detroit, Mich, have formed the "Detroit Physicians' Business Association," and those of Murphysboro, Jackson County, Illinois have formed "The Physicians' Protective Association" I have a letter from Dr O M Ormsby, the secretary of the latter, saying that the physicians down there are well pleased with its workings and are collecting their debts thereby, and, what is of more importance, if possible, they are running their own business and have made themselves known and felt as a power in the affairs of their county in the matter of pauper practice, establishing fees and abating the nuisance of dead-beats and their class

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A STUDY OF THE ETIOLOGY AND PATHOLOGY OF RHEUMATISM WITH SPECIAL REFERENCE TO "RHEUMATIC DIATHESIS"*

A P STONER, M D
DES MOINES IOWA

The term "diathesis" has so little to commend its use in the scientific terminology of medicine that it is fast falling into disrepute Indeed, it would seem that it is destined, sooner or later, to lose its place in medical nomenclature along with the "humors" of Galen In view of the ambiguity of the term then, I will define diathesis as that hereditary condition of the body organism which appears to be present as a necessary initial factor in the production of the disease

The disease which we ordinarily call rheumatism is only one manifested form of this malady Indeed, there appear to be many varied conditions of rheumatism Thus we may speak of rheumatism in a plural sense, in that it does not appear to exist as a single entity It should be understood however, that this construction is but a temporary one, and that, when we shall have solved the etiologic problem of their production, the diseases now placed outside this category, but which seem from their symptomatology to have a direct connection with acute articular rheumatism, will take their proper place in the nosology of diseases

PART PLAYED BY DIATHESIS

To what extent does so-called diathesis affect the etiology and pathology, and what may be implied by the term in connection with rheumatism? If we were able to explain the intricate problems of normal metabolism, if we could trace by any known chemico-physiologic law, the synthetic and analytic structure of the cell, and define the phenomena of life and death of protoplasmic mass we might be in a position better to explain the enigma of constitutional vices That they exist as a predisposing factor in the causation of diseases, as well as an inhibitory factor in the repair of the disease conditions, can scarcely be denied They have been variously described under the names diathesis, dyscrasia, predisposition, disposition, etc Under the name of diathesis it has been taught that the inclination is an inherited one, and this has been recognized since the early history of medical science The literal meaning of diathesis, when applied to the chemistry of the body, is that there is a tendency on the part of the animal economy to the development of certain diseases, by this it is not meant that the disease itself, but rather the family tendency to it, is transmitted It need not strain a point to say that the condition may be an acquired one

OTHER FACTORS IN THE CAUSATION OF RHEUMATISM

This brings us to the consideration of some of the other factors said to enter into the causation of rheumatism It was long thought, and is even held at the present day by some authorities, notably by Haig, that uric acid, retained in abnormal quantities within the system, was the cause of rheumatism and gout That uric acid or its salts exist as a pathologic condition is undoubtedly true, but it would seem almost preposterous to conclude, from this fact alone, that it is per se the cause of these phenomena It is by no means well attested that uric acid or its salts are constantly present in the blood stream even in well-defined cases By a liberal perusal of recent literature I find the consensus of opinion of the best authorities to be that rheumatism is directly due to bacterial infection Indeed, there is a strong tendency among bacteriologists to associate the infectious germ with all pathologic problems, and this association has in a measure been verified Yet we are unable by this theory alone to explain many of the special and characteristic features of diseases, and especially have we found it so in the diseases under consideration It would be to my mind more plausible to conclude that a relation exists between the biology of the infectious agent of rheumatism and uric acid formation, and that the presence of uric acid depends on the development of these germs Diathesis, then would appear to bear much the same relationship to rheumatism and gout, as so-called predisposition or dyscrasia does to other diseases which are not particularly hereditary in nature, as, for instance, tuberculosis typhoid fever, malaria etc In other words, diathesis defines the conditions under which infection takes place

In a paper published in the *American Medico-Surgical Bulletin* (1895), and recently republished[1] Dr Wm H Porter called attention to defective oxidation on the part of the system as the chief predisposing factor in bringing about the disease He assumes that in the "so-called lactic or rheumatic condition as in the so-called uric acid or gouty state of the system, all the toxic products within the system, and all the abnormal products found in the excreta, are due to the imperfect oxidation reduction, or faulty isomeric transformation of the proteid constituents contained in the animal economy, that the carbohydrates if taken in ordinate quantities being easily oxidized is done so at the expense of the proteid constituents, thus producing suboxidation of the latter" He undertakes to disprove the existence of uric acid or its salts in the blood stream, and erect the hypothesis "that as a result of faulty nutrition there is developed an imperfect and abnormal transmutation of the proteid compounds, that as a result the substances are oxidized at an abnormal position instead of in the renal cells as normally occur" However, he goes further than to merely assume that

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suboxidation of the proteid constituents act alone as the only element in producing the disorders, and concludes that micro-organisms may in a measure be responsible or rather that they so affect the food products in the alimentary canal, that they become abnormally oxidized in the cell protoplasm By this ingenious theory he is able to explain, at least to his own satisfaction, all the different forms and types of the so-called rheumatic affections seen clinically Each variety of infection he assumes to be due to its peculiar means of suboxidation, whether this be produced by a special bacteria or a combination of micro-organisms, or even, perchance, to a lack of micro-organisms in the alimentary canal He assumes here that certain forms of micro-organisms are essential to proper digestion He goes so far as to say that it seems quite probable that many of the toxic products are simply isomeric forms of the normal proteid molecule, he freely admits however the difficulty of isolation and proofs of this latter hypothesis Thus the difference between this theory and the one usually accepted, relating to micro-organisms as the etiologic factor, is that the latter theory assumes that the infectious germ is carried by the blood current to remote sites, as cartilages and joints for instance, where it deposits its germinal vesicle, which enters the system and completes another biologic cycle, ending again in a fully-developed bacillus

The suboxidation theory, however, seems to have few supporters, indeed, it is absolutely at variance with modern accepted views as to the formation of uric acid It would intrude upon the purposes of this paper to enter into a full discussion of the chemistry of uric acid, yet it would be incomplete without mentioning the researches of Harbaczewski,[2] Kossel and others who have shown that uric acid is not derived from metabolism of the general proteid mass, but from nuclein, that is it is the specific end-product of the nucleins contained in the nuclein of cells, and eliminated only when nuclein is broken up in the process of destructive metabolism From this, then, we are led to believe that the rheumatic process is accompanied by increased metabolic activity, instead of suboxidation which would signify a decrease, or a submetabolism

It may not prove amiss here to touch upon the atavistic possibilities in connection with the production of uric acid diathesis Much work is being done in this country and abroad just now in biologic research, and the literature along these lines is taking its place alongside of recognized scientific investigations It is too much for us to say at the present time that it is probable that the ontology of the human animal will ever be satisfactorily worked out, but it is possible to draw the logical conclusion that many pathologic conditions are traceable to ancestral defect, far removed from any forms of life now known to exist If uric acid is found in man only as a pathologic condition, may it not go to prove that this in an inclination or a partial reversion to the reptilian type in the metabolism of the cells? It is well known that the urine of the fetus and newly-born child contains an abundance of uric acid, and no one has to my knowledge attempted to explain the phenomenon However, to those who have studied pathologic phenomena from this point of view, this fact alone offers strong confirmatory evidence of its having been a purely physiologic excretory product of our progenitors Uric acid is a lower oxidation product than urea but it must not be understood by this that uric acid is a precursor of urea indeed it is as much of an end-product of proteid digestion as urea It appears as a trace in urine under normal conditions, but it is so inconstant in its relations to urea that it may be said to resemble a vicarious product, having more the appearance of a progenic relic than the result of a well-defined physiologic function Just why uric acid is the final excretory product in reptiles and birds and urea is much the final product in man, is one of the unsolved problems of nature, but that the elements of normal metabolism in the avian or reptilian type are present in man only as a well-defined pathologic condition, is a well-established fact With the same degree of reason we may propound the question Why does destructive proteid metabolism stop short of ammonia, carbon dioxid and water, in either case? This leads to the question To what extent, then, is the rheumatic condition inherited? It must not be forgotten that when the rheumatic condition is mentioned, it refers to all the allied group, gout included, for even though there is a great dissimilarity in the two conditions, I am constrained to believe that when we come to know more of the two diseases, it will be seen that they bear to each other a closer relationship than they are credited with at the present day A careful examination of the literature on rheumatism in infancy would lead us to believe it exceedingly rare Cheadle[3] makes mention of two patients, one 4 weeks, and the other 23 days old who were affected with acute rheumatism In the second edition of his text-book on medicine, Strumpell reports one case which he met in Leipsic R Abrahams[4] mentions two other cases, and reports three of his own all in infants at birth The first case resulted lethally on the eighth day In the second recovery was apparently complete after six months' treatment with salicylates Endocarditis was present in all three of the cases, and joint symptoms were difficult to make out There was a decided rheumatic history in the mothers, and two of them had acute rheumatic fever at, or just prior to, the birth of the child Joint symptoms in infancy, if present at all, are not apt to be detected but on the other hand the heart appears to bear the brunt of the disease Endocarditis is seldom present in the adult, except as a result of acute rheumatism or other rheumatic affections, and in infancy and in childhood it appears to hold true even to a greater extent This brings us face to face with another question—that which relates to fetal life Endocarditis has been discovered in many instances in the still-born child, and to my knowledge scarcely has an effort been made by clinicians to ascribe a cause, but since we have learned more of the true nature of the infection and its pathogenic predilection for the heart membrane I would ask Would it be a fantastic conclusion to say that rheumatic infection in the mother may be transferred to the fetus *in utero*, thereby causing its death? It has been proved that the heart is the target in infantile rheumatism, and this leads us to believe that there is a close relationship between chorea and rheumatism Out of seventy-three autopsies collected by Osler,[5] in deaths occurring from chorea[6] sixty-two had well-defined endocarditis In the same article he traces a direct rheumatic history in about 21 per cent Cheadle[6] finds that 65 per cent of his cases give a definite rheumatic family history Tonsillitis is often found to be associated with rheumatic symptoms and some authorities have thought the tonsils one of the inlets through which infection takes place Frederick A Packard[7] has recently reported five cases of endocarditis following tonsillitis His paper is well worth

a careful perusal, for tonsillitis as a cause of endocarditis is rarely mentioned in text-books The connection between scarlet fever and rheumatism has been the subject of much discussion It is thought by many that an etiologic relation exists between them The erythemata are said to have a similar connection, and so has purpura

PATHOLOGY

From the foregoing it will be seen that the true pathology remains yet to be written The existence of free uric acid or its salts in the blood stream is seriously questioned They nevertheless do exist in the tissues in pathologic conditions That the blood stream is the medium which carries the morbid agents to their various destinations in the body, there is no doubt It is also true that the alkalinity of the blood is reduced, and at times it may very nearly approach acidity There is a decreased number of red corpuscles, and they may transude through the capillary walls and produce ecchymoses The blood has an abnormal tendency to clot, mostly on account of excess of fibrin The urine is highly colored and has a high specific gravity Uric acid is found in abundance, but there is little if any increase in the production of urea The synovial fluid is abundant and of an acid reaction The whole of the joint structure is more or less involved, and the articular surfaces become roughened It is in the joint structures that the "battle royal" between the body cells and the infectious agents usually takes place The latter, by a series of sorties attack the system at one of the weakest points in its line of defense, and the debris of uric acid salts, the roughened cartilages, etc, tell the story of the great central conflict, while the abnormal vascularity and thickening around the joint structure point to the concomitant forage and skirmish actions, in the battle for supremacy between the body organism and the infectious agents of the disease However, the infection may strike directly at the heart, producing none of the stereotyped symptoms of rheumatism except endocarditis Among the conclusions I wish to draw from this study are 1, that rheumatism is directly due to an infectious germ and that the symptoms produced vary in accordance with the position and attenuation of these germs, 2, that these germs may at times complicate other disease conditions, as for instance scarlet fever, thereby causing rheumatic symptoms, 3, that the nidus of the germs may be located in the joints, which is usually the case, especially in adults or more rarely in the heart, and quite frequently in the muscles, 4 that the uric and lactic acid found in these cases, are products, rather than the cause, of the disease, and that, of themselves, their presence is not pathognomonic of gout and rheumatism, in that they simply show the result of katabolism of the body cells, which condition may be brought on by numerous nutritional disorders, 5, that hereditary tendency if carefully sought out, may be found in a large majority of cases, 6, that gout and rheumatism, although very dissimilar diseases, each possesses so many traits in common that we have been led to place them in the same family of diatheses Both produce the same end-products of tissue metamorphosis, their nidi of infection have much the same location, and the pathologic conditions found therein are closely related There is a tendency to cutaneous disorders in both diseases I must remark here, however, that not all of the symptomatology of the gouty state described in books should be taken for granted, for under this head authors have included almost every symptom to which our humanity is heir from eczema to chronic gleet True it is, they have all been found underlying gouty conditions, but there is nothing else to prove their relation to the gouty state The difference between the gouty and the rheumatic subject is that one contains that special ingredient requisite to the propagation of the gouty poison, while that of the other harbors a rheumatic poison I am of the opinion that both conditions are brought to the acute crisis by the agency of an infectious germ, the true biologic nature of which remains yet to be discovered A further consideration of this part of this most interesting subject, however, would carry us far beyond the limits of this paper

REPORT OF CASE

Since the above was written, a case has been brought to my attention which so much engages the subject in hand that I can not forego the temptation to offer a brief report upon it Not on account of its rarity, however, for it is such a one as is often seen and many times dismissed by the attending physician without serious consideration, if a physician's advice is even procured

E V, a girl 4 years of age, was brought to my office with the following symptoms For two or three days she had suffered from a slight cold Her head was much inclined to the left side being slightly bent forward, and she was unable to rotate it upon the neck on account of pain There was marked swelling of the muscles of the left side of the neck, slight pyrexia with an accelerated pulse There was a history of "growing pains," and of rheumatic symptoms in the mother The child played out of doors the next day, and on the third day had a slight rigor, and I was asked to see her again I found the temperature at this time 101 5 F, and the pulse was much accelerated I gave strict orders that the child be kept in doors and placed in bed In the afternoon a symptom presented itself which served to alarm the parents more or less The child, naturally somewhat nervous, became fidgety, and some of the muscles began to twitch, especially those of the lips and other facial muscles The temperature being low, I was able to quiet the fears of the parents as to threatened "spasms," yet, indeed, I had graver fears of my own, lest genuine chorea might ensue I accordingly ordered the dose of sodium salicylate which had been given from the onset, but in too moderate doses, increased to 20 grains a day The temperature continued to rise for several hours until it reached 103 8 F, by the next morning it was normal and the heart's beat became slowly reduced from 130 per minute to 100, and even lower She at no time would have been considered a seriously sick child The appetite scarcely failed her, and no other symptoms were noted except that, on the fourth day, she complained of pains in the left arm and wrist Upon examining the throat, I found the tonsils and pharynx somewhat inflamed No complaint, however, had been made on account of this condition It was difficult to make out any roughening of the heart's tone and, indeed, I do not believe there was any perceptible lesion present I had little evidence on which to base my opinion, or rather fear, of threatened cardiac complication, except the rapidity of the pulse-rate—which is no proof at all—and the generally accepted opinion that rheumatism in childhood is prone to attack the heart The diagnosis was carefully made by absolute exclusion, and considering the fact that, as soon as the increased doses of the salicylate began to take effect, the symptoms were brought promptly

under control, leaves little doubt in my mind as to the correctness of the diagnosis

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A CASE OF ACUTE DERMATITIS CAUSED BY THE USE OF A HAIR-DYE HAVING FOR ITS BASE THE HYDROCHLORATE OF PARAPHENYLENE DIAMIN

A D MEWBORN, M D

NEW YORK CITY

On Jan 30, 1901, Mrs A G aged 44, married, a native of Venezuela, was referred to me by Dr W H Haskin, suffering with a severe attack of dermatitis of the face and a pruriginous, papulo-vesicular eruption on her arms and thighs The forehead was swollen, red and shiny with a few small vesicles near the margin of her hair The eyelids, especially the upper, were puffy, the conjunctivæ slightly congested, the ears red and swollen, along the upper margins were numerous small vesicles filled with straw-colored fluid, which in places had exuded and formed granular crusts resembling "brown sugar" The nose and cheeks were slightly swollen There was no eruption on the neck or chest, but the flexor and extensor surfaces of the forearms, and the anterior and inner sides of the thighs presented numerous small, slightly elevated papules, mostly perifollicular and a few vesicles The arms and legs were quite pruriginous at times The face felt tense, uncomfortable, with some prickling sensations, especially marked in the eyes The patient admitted having had a somewhat similar eruption at intervals during the past seven years, on her arms, legs and body This eruption, diagnosed as an eczema, was always preceded by gastric and neurasthenic crises

The distribution of the most intense phases of the eruption along the hair border and on the upper part of the ears suggested a closer examination of the hair, which, although very dark, showed signs of having been dyed in the temporal and frontal regions

On questioning the patient she admitted that for three weeks she had been using a French hair-dye, and a day or two after commencing its use she had experienced a prickling sensation in the eyes, followed by an intense inflammation of the entire face This subsided to its present state

This hair-dye dermatitis is well known at L'Hôpital Saint Louis, Paris, where it is very frequently met with in the out-patient clinic Its zone-like distribution to the upper third of the face, the swollen eyelids, and the vesicles on the upper margins of the ear, give it an almost pathognomonic appearance, so much so that Fournier will frequently astonish the patient by saying "Madame, you dye your hair, you use a dye composed of two liquids, you apply the dark liquid first and then the clear liquid" For such is the method of employing the hydrochlorate of paraphenylene diamin.

Cathelineau,[1] who made quite an exhaustive report on the accidents produced by the use of this dye describes it as follows The hydrochlorate of paraphenylene diamin is found in commerce in the form of red, mica-like scales without appreciable odor crystallizes at 102 C, melts at 140 degrees, boils at 260, distills at 267, is soluble in water, alcohol and ether All oxidizing agents transform it into quinone This transformation takes place slowly on exposure to air, almost instantly on addition of oxygenated water, or some other oxidizing agent

Reactions If to a liquid containing the paraphenylene diamin one adds a small quantity of its isomere in meta and the bichromate of potash, there is produced the blue of toluidin, whose intense blue color is characteristic A few drops of a solution thrown on a filter-paper which has been saturated with oxygenated water gives a dark red color which rapidly becomes black A few drops of a diluted solution of nitrate of potash gives with it a greenish-yellow color which becomes dark

Preparation To obtain the paraphenylene diamin, one separates from the paranitrilin which has been reduced by tin and hydrochloric acid, the reaction terminated, the tin is precipitated by hydrogen sulphid The base is extracted by ether from the aqueous solution, rendered alkaline, purified by distillation and sublimation under a current of hydrogen

Physiological effects Paraphenylene diamin — $C_6H_42(NH_2)$—has been studied in its physiologic effects on dogs by Dubois and Vigum[2] (1898) who used the pure drug alone by hypodermic injections, while more recently (1901) Laborde and Meillere[3] have used the mixture as found in the dye both by intravenous injections and subcutaneously Their results agree in every point except the lungs, which the former found exsanguinated, the latter in a state of intense congestion In doses of one decigram to a gram hypodermically administered to a dog, there was produced salivation, diarrhea and tenesmus, somnolence, difficulty of respiration, sneezing, coryza, abundant nasal discharge hoarse voice, irritation of eyes, hyperesthesia of the conjunctivæ, with temperature falls, difficult gait, stiffness of the legs, opisthotonos and death in twelve to twenty hours The autopsy shows all the tissues darkly stained, the blood and muscles dark as "ink," the left ventricle in systole and empty, the liver brown to an almost violet tint Melliere[4] also calls attention to the dark mahogany-colored urine found in his experiments and also in his patient whose case he reported This was not found to be the case in our patient, whose urine was light amber, acid, 1030, urea 026 per cent, no sugar nor albumin, excess of chlorids

Method of using In commerce the dye is found in two solutions, No 1 containing an aqueous or alcoholic solution of the hydrochlorate of paraphenylene diamin, No 2 containing oxygenated water The dyeing is effected in two processes A few cubic centimeters of solution No 1, on a brush or sponge, are passed over the hairs to be colored, after a few seconds, another brush or sponge wet with solution No 2 is used The effect is almost instantaneous There is produced quinone—$C_8H_4O_2$—well known in organic chemistry, which gives off very irritating vapors at ordinary temperatures The hair or beard has at first a violet tint which becomes darker under oxygenated water, by varying which tints varying from chataine to jet black may be obtained

Clinical study The seat of the eruption is almost always on the border of the hair or upper lip in those who dye the mustache The forehead, neck ears, sometimes the entire face, the external surface of the arms, shoulders, back, even the entire body may be affected

The eruption may come on after the first application, or not until after it has been used for months Some subjects who do not have an eruption complain of a prickling sensation in the eyes for days after its use The intense itching is another characteristic This may be most marked in the scalp and is the usual precursor of the eruption, which appears as bright red placques, with irregular borders along the margins of hair The skin becomes thickened and also stretched, and the placques disappear under pressure The lids become swollen after a few days of itching Under light desquamation the spots become pale and disappear, constituting the benign form In the medium form, such as our case, with an eruption of bright red erythematous patches, with rare intervals of normal skin, the color does not disappear under pressure In places there are urticarial elevations, papules, small vesicles filled with clear serum or milky fluid, in places dried crusts, often yellow and impetiginous The ears are swollen, the skin thickened, exuding serum where vesicles become broken Itching may be so intense as to break sleep There is slow return to normal, the skin remaining rough and edematous, desquamating for weeks

Brocq,[5] in addition to the above light and medium forms, describes a third or grave form with violent erysipelatoid eruption, with fever, adenitis extensive desquamation, etc He mentions the case of a young American woman whose entire body desquamated, who had great depression and fever, with prolonged convalescence and tardy recovery He recommends that in view of the increasing number and severity of these cases, the law should insist upon a label stating that this substance is "dangerous for all persons who have had eczema or who have irritable skins" G Tissot[6] arrives at the conclusion that all hair dyes at present known are dangerous, that they may determine inflammatory or toxic accidents, and that it is necessary to regulate the sale, inasmuch as accidents are becoming more and more numerous as their use becomes generalized The paraphenylene diamin he considers most constantly productive of accidents Balzer[7] relates a case of an eczematous eruption produced by the irritation from a dye used in hose, which dye proved on chemical analysis to be the chlorate of paraphenylene diamin The eruption came on twenty-four hours after wearing new hose, which were dyed black, with red, yellow, and green stripes There was violent itching and the back of the foot presented typical lesions of acute eczema—small papulo-vesicular eruption, and diffuse redness not extending higher than the ankles The soles of the feet, while presenting no eruption itched intensely It was curious to remark that the eruption was in bands corresponding to the black and green stripes, there was no eruption corresponding to the red and yellow stripes The chemist reported that it was precisely the black and green portions where the coloring matter was the paraphenylene diamin

Résume The duration of eruption may be from several days to several weeks Sometimes exacerbations may occur when one thinks the patient nearly well In the etiology one must always take into consideration, as in all chemical or medical eruptions, the personal predisposition or idiosyncrasy, and avoid in the treatment any application containing resorcin, which Laborde and Mellière[8] have shown often is used combined in the hair-dye, and under oxidizing influences becomes an irritating coloring product The prognosis is in general good, but the patient should be warned against continuance of the dye for fear of the grave form described

Differential diagnosis Confusion might arise with acute eczema, especially where patients usually deny the use of a dye Nevertheless the suddenness of the manifestations, enormous swelling of the lids, the metamorphosis of the physiognomy are good guides

Treatment The usual calmative agents employed against erythematous eruptions due to external causes may be used The hair must be sacrificed in the grave forms, as the dye in the hair still acts as an exciting cause As a question to be studied there remains the query, does the eruption appear on the body from transferrence of the irritant by the hands, from nervous erethism, or it is absorbed in quantities sufficient to cause systemic effects?

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224 West Fifty second Street

DIFFICULTIES AND DANGERS OF ANESTHETICS

DANIEL N EISENDRATH, A B, M D
Professor of Clinical Anatomy, College of Physicians and Surgeons
CHICAGO

Ever since the first deaths resulting from the administration of ether and chloroform, there has been considerable discussion as to the manner in which they cause them One of the most important contributions was that of the Hyderabad Commission, which concluded from its experiments on animals that chloroform kills by its effects on the respiratory system Mellish believes that it exerts its bad effects primarily upon the circulatory system, an opinion which is supported by Leonard Hill Practically all observers agree that chloroform causes lowering of blood pressure at all stages of the anesthesia Ether produces a slower fall than chloroform Whether the paralysis of the respiratory precedes or follows that of the circulatory systems is of but little practical importance, for the interval between them is so slight as to be almost imperceptible The writer has in some cases observed a cessation of respiration before that of the heart's action, and in others the reverse condition Leonard Hill has shown that there are two kinds of syncope, a primary and secondary The former occurs in the very earliest stages, the latter later It may be due to fright or other psychic influences In some cases there seems to be no apparent cause Respiratory difficulties may be spasmodic, asphyxial or paralytic The two former occur more frequently during ether than chloroform anesthesia The last-named danger is far more frequent after chloroform When this takes place, the respirations gradually become slower and more shallow the color of the face and lips becomes grayish, the pulse imperceptible, and the pupils widely dilated

The group of symptoms in which the heart first shows the effects of an overdose of the poison—secondary syncope—differs but slightly from the above, and the anesthetist who closely watches the respiration, color of face, pupil and pulse of the patient from the time the anesthetic is begun will note even slight danger signals quite early It has been the habit of the writer, in his own cases and when instructing others, especially when chloroform is to be administered, to call attention to the following points Remove all foreign bodies from the mouth, also all constricting neck or waist bands Talk reassuringly to the patients, or divert their minds by having them count slowly up to fifty Do not permit any loud talking or noise of preparations to be heard by the patient Do not begin to remove dressings or prepare the field of operation before the stage of relaxation Examine the heart, lungs and the urine before every anesthetic (This will be referred to later) Note the size of the pupils, the character of the pulse in regard to pressure and frequency, and watch both pulse and respiration, and the color of the face during the entire operation, keeping the hand on either radial, temporal or facial arteries, as the engineer does his hand upon the throttle The writer has been able a number of times to guard against a syncope by noting the manner in which the pulse decreased in frequency and force The pupil is at first dilated moderately, then somewhat contracted, responding, however, to light, but when it dilates again, or, in other words, the secondary dilatation occurs, with failure to respond to light, that is one of the earliest symptoms of syncope The anesthetist should pay absolutely no attention to the operation, and should not be changed during it

TREATMENT

The curative treatment of the immediate difficulties and dangers in the milder forms, such as spasm of the glottis, is to remove the anesthetic—usually it is ether which causes this Forceps of the kind used by the laryngologists with pieces of cotton, will easily remove any mucus which has accumulated above the larynx and causes cyanosis This is best done by placing the patient's head—if it has not previously been so—on its side directly upon the table At times it is necessary to force the jaws apart with a special (Heister) gag It is seldom necessary, if care is taken, to hold the jaw up and forward to use a tongue forceps For the more severe forms of danger, such as sudden heart or respiratory failure, we should have some system or order in which the various methods or remedies shall be applied The writer usually employs the following mechanical means first, for there can be but little object in giving cardiac stimulants before there is a circulation to carry them to the heart

1 The method of König, or massage of the heart, I have employed eight times with startling results This consists virtually, by a number of pushing movements with one or both hands over the heart in exciting a ventricular contraction and thus preventing the paralytic dilatation of the heart from taking place This method was first suggested by Professor König, and is but little known in this country As soon as the heart or breathing has ceased, the operator, by rapid "punchings" with the flexor surface of the half-closed hand, without lifting the latter from the chest wall, seeks to start up a contraction of the ventricles I have saved three patients by this method alone during the past six months It is really a shaking-up or massage of the heart In a dog on which I performed a thoracotomy, the heart's action ceased as soon as the thorax was opened The König method was employed, while one hand was kept over the heart—from the interior of the chest The effect of this shaking-up of the heart through the external jolting was remarkable The organ began to pulsate and continued to do so for several minutes

2 The next method, and one which can be carried out simultaneously by another assistant, consists in mechanically exciting respiration by the so-called pharyngeal reflex, by making rhythmical tractions upon the tongue (Laborde method) Insert a tongue forceps and pull the organ, by its tip, out of the mouth as far as possible, about sixteen times a minute

3 As soon as possible, raise the foot of the table say 1½ to 2 feet, or bring the patient's head over the edge of the table, permitting it to hang down At the same time, begin with artificial respiration (After No 1 has been employed) Have two assistants—one on each side—bring a semiflexed arm down upon the lower portion of the chest, compressing this, then raising the arms above the head by extending them and bringing them to the chest wall again

4 By this time respiratory or circulatory paralysis will have either become permanent or temporary If the latter, a few feeble pulsations can be felt and an occasional shallow breath be noticed Now, an amyl nitrite pearl can be broken and its contents inhaled Strychnin, 1/30 gr and digitalin in 1/50 gr doses can be given hypodermically, later whisky atropin or ammonia

5 Bleeding from a large vein, if the patient is plethoric, or the subcutaneous injection of a quart of normal—0 6 per cent—salt solution, if there is any suspicion of a combination of syncope, with hemorrhage, is extremely valuable and rational

6 Acupuncture of the heart has been tried as a last resort in two cases, by McArthur, with an encouraging result Tracheotomy, stretching of the sphincter, irritation of the nostril, and electricity are of doubtful value

To sum up 1 Massage of the heart (König) 2 Rhythmical tractions of the tongue (Laborde) 3 Artificial respiration 4 Cardiac stimulants We should persist in our efforts, even in the most discouraging case, at least half an hour

AFTER-EFFECTS

In regard to some of the after-effects or dangers of anesthetics, many can be avoided by proper regard to their prevention Before every anesthesia is begun the urine should be carefully examined for sugar, albumin and casts This will only require a few moments, especially if a centrifugal apparatus is at hand, and may spare the operator a great deal of chagrin if a patient whose relatives he had assured that there was practically no danger should die within forty-eight hours of uremia It has been shown conclusively by a number of investigators, both through experiments on animals and clinical observations that both ether and chloroform have an injurious effect upon the renal parenchyma My own observations on 110 cases about equally divided between chloroform and ether have been confirmed by a number of others They were as follows Ether and chloroform will cause albumin and casts in small amounts and number to appear after they have been administered to patients whose urine during repeated examinations was previously shown to be normal. This will occur more frequently after ether Upon the diseased kidney it (ether) has a decidedly more harmful

action, causing in some cases acute suppression of urine, uremia and death Chloroform, if administered during an operation or obstetrical case, as shown by Fraenkel, for a period of three hours or longer, may cause fatty degeneration of the renal cells and uremia On the diseased kidney chloroform has a far milder action than ether, although occasionally a case of nephritis will be anesthetized with it and uremia follow, as in a case I observed a few weeks ago Both in cases of diabetes, will frequently increase enormously the sugar

Another dangerous after-effect which can be avoided is pneumonia following ether anesthesia A careful examination of the lungs will quickly aid us to diagnose a bronchitis or emphysema Such persons bear ether poorly and should, if the heart permits, be anesthetized with chloroform In regard to the latter organ, patients with heart trouble should be anesthetized either with ether or the A C E mixture In many hospitals abroad and in the East, the anesthetist is either a paid assistant, who remains for years, or is assigned to this task as an interne for many months Slips are filled out for each anesthesia, stating the condition of the heart lungs and kidneys before operation, etc This is not impracticable even in small hospitals and saves many a life

CONCLUSIONS

I have tried in the above to give a brief outline of the causes of syncope during anesthesia, their treatment, and some of the after-dangers or effects Ether, with the exception of its bad effects upon the kidney, is by far the safest anesthetic Chloroform kills quickly, ether slowly The dangerous symptoms of the former are far less amenable to treatment than those of the latter Children respond more quickly than adults to efforts at resuscitation

A careful examination of patients is absolutely essential In serious cases the urine should be collected for several days, and twenty-four hour specimens examined, especially in renal operations or laparotomies Do not give one anesthetic, be it chloroform or ether, indiscriminately to every patient We should consider age condition and the nature of the operation I append an excellent list, compiled by J Frederick Silk, an English authority on anesthetics, which I have found very useful to remember 1 *Age*—Under 3 years, chloroform all through, between 3 and 12 years, A C E mixture (alcohol 1 part, chloroform, 2 parts, ether, 3 parts), between 12 and 60 years, ether, over 60, induce with A C E mixture increasing the proportion of ether in long operations 2 *Condition of patient*—In the fat and plethoric, induce with A C E, and gradually increase the proportion of ether in long operations, in acute or very recent lung troubles, give chloroform all through, in chronic lung troubles—bronchitis or emphysema—give A C E all through, in organic heart disease, if there is not sufficient compensation, e g, pulmonary edema, use A C E or chloroform, if compensated, ether, in marked atheroma induce with A C E, and increase the ether proportion in long operations 3 *Nature of operation*—For an intracranial, give chloroform or A C E, for those on the tongue and mouth, induce with A C E and change for chloroform when the operation begins, in operations on the head and neck, begin with A C E, increasing the proportion of ether in long operations, in those on larger joints, always use ether, if possible, in abdominal, we do well with ether, but many prefer chloroform, in rectal and genito-urinary, use ether

The writer can agree most heartily with most of the above, and would add, under No 2, in kidney disease, use preferably chloroform, or A C E

103 State Street

THE VESICULAR MURMUR AND ITS RELATION TO PULMONARY HEALTH AND DISEASE *

THOMAS NEIL McLEAN, M D
Visiting Physician to the Elizabeth General Hospital and Dispensary
ELIZABETH, N J

My purpose in this writing is to individualize this one and only ausculatory sign as the criterion of pulmonary health, its absence as the positive proof of either functional or organic disease, also suggestions as to the most successful method of restoration and its application to the treatment of pulmonary tuberculosis

In the auscultation of the normally acting healthy chest, two sounds are heard on inspiration, totally different in production, location and character The first is the bronchial sound, caused by the friction of the inrushing tidal air, through the convective system of tubes, and is, in varying quality and pitch always present in health and disease It is first in regard to the time of its production in the inspiratory act, and, during the first eight to twelve years of life, is the only sound heard in health, the pulmonary system being as yet incomplete The tidal air does not pass as such further than the third or fourth division of the bronchial tubes, consequently the murmur which follows the bronchial is entirely distinct from the bronchial in location and character, although wholly dependent on it for its production

Where tidal air ceases, residual air commences and fills the entire pulmonary system, the volume of which is increased about one-tenth by each normal inspiratory effort It is this increment of tidal air imposed upon the residual air, which renders the air-sacs tense, and produces the vesicular murmur by the contraction and relaxation of their walls upon the residual air Here the interchange of gases takes place, in accordance with the well-known law of diffusion, and the circle of the inspiratory act is complete

The vesicular murmur begins as soon as the residual air is increased to the extent of rendering the air-sacs tense In full breathing, it is heard before the tidal friction sound of the bronchi ceases, producing the bronchovesicular murmur, and is continuous after the bronchial sound ceases

The production of the vesicular murmur may be prevented or interfered with in part, by various influences and conditions of disease, some of which are not incompatible with a considerable degree of comfort and usefulness, for a limited period

The conditions of this period, we are to take particular notice of, as it is the true pretubercular period

We very commonly meet with cases in which the vesicular murmur is entirely absent, except in forced inspiration

In women, this is very often the case as a result of tight clothing, with the outward and upward movements of the chest, and the murmur can not be produced in the lower lobes of the lungs until the constriction is removed

We often hear the expression "weak lungs," as ap-

* Read before the Clinical Society of the Elizabeth General Hospital, Nov 20, 1900

plied to people of sedentary pursuits or to those who by heredity or environment are lacking in energy and vitality I prefer to call them "lazy lungs," as better indicating an exact condition, and as a means of impressing the patient with the fact that by his own exertion he may have strong lungs Lazy lungs are those in which the pulmonary function is imperfectly performed in the absence of all organic disease, resulting in a disproportion of blood and air in the lungs, the former being in excess, and its progress through the lungs being retarded

As the blood current rushing into the heart excites it to forceful contractions, so too the air-currents, rushing into the lungs with each inspiration increasing the tension of the alveolar walls, stimulates them to contraction as evidenced by the vesicular murmur The necessity for a proper volume of air is just as important for the lungs as a due proportion of blood is required for a perfect and forceful contraction of the heart The contraction of the air-sacs produces not only a more rapid interchange of gases but also aids in the propulsion of the blood through the pulmonary capillaries, relieving stasis, and preventing exudates

An incomplete pulmonary function produces blood stasis, and stasis produces exudation which may take place into the bronchi, the intercellular spaces, and upon the surface of the pleura When these exudates occur, there is more or less muffling of the vesicular murmur, and according to degree and location the production of râles either bronchial or interpleural That which is exuded into the intercellular spaces causes no sound, but interferes with the production of the normal vesicular murmur These exudates often occur simultaneously, and are found most frequently in the apices, about the third intercostal space in front, and reaching directly through to the pleura in the interscapular space These exudates, which are purely of a non-inflammatory character, when stirred by respiration, produce râles which are usually diagnosed as bronchitis, but in consideration of their etiology in obstructed circulation, more properly called bronchial catarrh or catarrh of the apex, a result of pulmonary inactivity, a passive condition rather than an active process

There are many direct causes of this passive condition I have already mentioned the effect of tight clothing in women, which is so often persisted in to such an extent as to produce an arching of the sternum compensatory to the constriction This takes place only in vigorous breathers, with good muscular development

Sedentary occupations are productive of pulmonary inactivity Underfeeding and overworking, the hard side of life, worry and care and many others, any one of the many influences in life which weaken the muscular system indirectly through the nervous and digestive systems, exerts a depressing influence on the respiratory system by decreasing the activity of the diaphragm and chest muscles, and thereby impairing the function of respiration in the complete oxygenation and vitalizing of the blood, which process is announced by the vesicular murmur

Big breathers are good eaters, and big eaters are good breathers as a rule, because the muscular and nervous systems are well nourished

Tuberculous infection becomes a possibility only when the soil is prepared for the reception and propagation of the bacilli Our attention has been directed so much during the past dozen years to the bacillus and the means of combating it with drugs and serums all of which have proved of doubtful utility, that it seems to me that we should take a new departure not only in our pathological views relative thereto, but also in our practice

Much has been said and written in regard to "suitable soil" without defining exactly what that soil is, how it is produced, and how immunity may be acquired It used to be taught that man possessed a surplus of pulmonary tissue which was not always required to be in complete action, but was kept in reserve for emergencies This was certainly a fatal mistake, for all that a tubercle bacillus wants for a comfortable home is a choked capillary bronchus, either the result of insufficient expansion of a lazy lung, or of an active process of congestion or inflammation The tubercle bacillus fails in its attack upon healthy tissue, it succeeds only when it finds either functional or organic abnormalities

Imperfect function, as evidenced by the absence of the vesicular murmur must always result in organic disease sooner or later—not necessarily tuberculous—and it is all that is required, as the primary condition in furnishing a suitable soil for the bacillus in the pulmonary tissues

The pulmonary apices are primarily infected as a rule, because they are not as continuously and thoroughly expanded as the middle and lower portions, consequently blood stasis occurs, producing exudation as revealed by the "mucus click" This symptom has been regarded by many good clinicians as a positive evidence of tuberculosis without the evidence of the microscope I have seen many such cases of catarrh of the apices under the practice of systematic expansion make a complete recovery of the function, with the removal of all abnormal auscultatory sounds, and the return of the pure vesicular murmur which is the evidence of pulmonary health

We might as well try to strengthen a weak arm by carrying it in a sling, and by the administration of drugs, as to strengthen weak lungs by any and all the drugs known to medical art, without attention to the deficient function In the treatment of such conditions we must use the same common sense which would guide us in the treatment of weak muscles or organs in any other part of the body

Use and use only, makes strong muscles and strong lungs The better the oxygenation of the blood, the greater is its capacity for the reception of nutritious pabulum, with an increase of red corpuscles The cold, livid finger tips become warm and of a healthy pinkish color, the appetite is improved, and every function is benefitted to a remarkable degree, with increase of body weight and endurance

In the examination of the chest, our attention should be directed first, not so much as to what abnormal sounds are present, but as to the degree in which the normal sounds are present or absent, for the purpose of ascertaining whether an anatomical recovery may be obtained in order that we may obtain a clinical recovery In any impairment of pulmonary function, whether the microscope reveals the bacilli or not, it is safe always to suspect that such a development may occur, because the soil is prepared for the seed, and our efforts should be immediately directed toward the cleaning up of that soil, so that there shall be no suitable habitat for the bacillus The vitality of the tubercle bacillus is very low, and unless it finds a location exactly suited to its growth and development it perishes

If, according to Nuttall, a tuberculous patient expectorates about three billions of bacilli in twenty-four hours, certainly only a very small number find a suitable soil for their support and yet when we take into account Naegeli's statistics in the pathologic institute of Zurich it appears that the infection is almost universal, as active or latent, being 97 per cent of those over 18 years of age, with positive evidence at autopsies of non-fatal tuberculosis

The human system then is able to resist the infection of tuberculosis in a very large majority of cases, and it must be from nature that we may expect to learn the method of successful treatment, for our art has failed by drugs and serums alone Even should we be able to cure a specific case by tuberculin or other serum, what is to prevent a new infection if we leave the lungs in the same condition as they were in before the bacilli were rendered innocuous, for it is through the respiratory apparatus much more than through all the other organs or tissues, that the infection is received?

This brings us to face the stubborn fact of the suitable soil, which Nature by its own processes succeeds in changing to an unsuitable soil, and as Vergely has tersely expressed it "The soil is everything, the microbe nothing," and another, "that Koch's bacillus is not enough to produce tuberculosis"

There are no doubt other factors which go to make up this preparatory condition beside deficient pulmonary function We may yet learn that good rich blood contains an antitoxin principle, which it may not always possess, particularly when deteriorated, and that the loss of this antibacillary power is the cause of the system succumbing in rapid miliary tuberculosis Mays believes at tuberculosis may be primarily a neurosis and ces plausible argument in support of his theory, from my present standpoint I look upon the neurotic condition as contributory to that condition of pulmonary inactivity which may be both a cause and an effect in the preparation of the suitable soil

It can not be denied that the tuberculous infection is well-nigh universal, and that but few in comparison to the great number infected, live the average life of man, without at some time being infected by it Autopsies made upon those dying of other diseases and by violence prove this

The greater number of those infected recover without the knowledge of the fact of infection Nature can and does get rid of the bacillus, and although there may not be a complete anatomical recovery, as indicated by the scars left after the healing of cavities, yet there is a complete clinical recovery, and full functional activity of all the remaining pulmonary tissue Fibrinous exudations upon the pleural surfaces form adhesions between the opposing surfaces when there is deficient pulmonary activity, and according to their closeness and thickness, prevent the expansion of the subjacent lung tissue, as evidenced by the muffling or complete absence of the vesicular murmur

The starting-point of a tuberculosis may have been years before the actual onset of the disease, occurring in a pleurisy, or a pleuropneumonia, in which the exudates have not been absorbed, but remain as an organized barrier to perfect respiration, either in the lung tissue or on the pleura, and thus furnish the suitable soil for the bacillus After the clinical recovery from a pneumonia or pleurisy the closest attention should be given to the anatomical recovery, by systematic expansion of the lungs until the pure vesicular murmur is heard without muffling, when there will be no soil suitable for the bacillus The expansion of the lungs is very materially aided by cold friction baths There is a direct nervous connection between the skin and the lungs

The nervous center which governs inspiration is situated in the gray matter of the medulla, opposite the roots of the pneumogastric nerves, and the nerves which have their center here are the pulmonary branches of the pneumogastric and sympathetic, the latter containing fibers from the spinal cord, also the cutaneous nerves of the face, arising from the fifth cranial pair and the cutaneous nerves of the body generally Through these excitor nerves, a stimulating impression is made upon the center by cold friction baths, and this is immediately followed by deeper inspirations

It is through the intimate nerve connections between the skin and lungs that such remarkable results in the treatment of tuberculosis have been obtained by Winternitz and others in hydropathic institutions, and distinguishes cold bathing as a most valuable adjunct in bringing about a clinical recovery of the lungs, in which the bacillus can not grow and in which the inspiratory act is complete in the pure vesicular murmur

We should early discover the evidences of tuberculosis in order to treat it successfully, but we should much earlier discover whether the soil in any suspected chest is prepared for the ever-present bacillus, and by attention to the function of the lungs put them in such condition that infection shall be an impossibility This is to be done by systematic mechanical expansion of the lungs by appropriate exercises, by the daily use of cold friction baths, by regulation of the diet, by the administration of such medicines as shall strengthen the nervous system and enrich and invigorate the blood cells by attention to the sanitary condition of the home, by the proper ventilation of living and sleeping rooms, by life out of doors, by cheerful surroundings and cheering company, by a full and clear statement of the case to the patient, concealing nothing of the dangers of such conditions, by the assurance of rapid improvement and perfect restoration to sound health, as a result of strict fidelity to the requirements as directed by the physician

In a recent article, "On the Early Recognition of Tuberculosis," a physician detailed a series of symptoms which to me appear as very late symptoms Clubbed fingers, emaciation capricious appetite, cog-wheel rhythm, intermittent albuminuria, and hemoptysis present to me a picture far on the way to a dangerous and probably incurable stage

The difficulty of diagnosis—of which much has been written—and the dangers of becoming tuberculous become as nothing if we accept the clinical evidence of an impaired function, producing the suitable soil for the bacillus, and when we act upon that evidence, in Nature's method of restoration, by opening up and clearing out every tube and cell, by systematic expansion of the chest

Where purulent infection has taken place, as in an ovarian tube or the appendix vermiformis, or in any locality of the body, we put in the knife and clean out the cavity and thus get rid of the infection In choked bronchial tubes, which are the starting points of the active process of infection, we can put in air, which is quite as incisive and effective in the relief of such conditions as the knife is in the others

Why should we wait until the infection has been proved by the microscope, before commencing radical

treatment, when the clinical features of the case warrant us in declaring that such a chest is prepared for the bacillus, through imperfect function, or through exudations resulting therefrom In this respect we have been leaning too much upon the evidence of the microscope and too little upon equally as positive clinical evidence, of far more valuable diagnostic importance, viz imperfect function, as shown by the absence or muffling of the vesicular murmur If we accept the clinical evidence, the fight with the bacillus can be easily carried to a successful issue outside the walls But if we find that the bacillus has already taken possession, the fight will be longer and harder, and accompanied with many dangers, although it may yet be carried to a successful result if we follow the teachings of Nature, so far as we know

It is impossible to describe in words the sound of the vesicular murmur Every individual physician must acquire a knowledge of it through his own independent discovery, by carefully listening to many healthy chests until his own senses are forcefully impressed with its character and language It is a gentle breezy sound, exactly like nothing else in the world, but when thoroughly appreciated one of the most delightful sounds the ear can listen to, for it means absolute health, its absence, absolute disease sooner or later, unless restored by appropriate means intelligently directed

The methods which I have used for many years were described in an article entitled "Personal Observations in Pulmonary Phthisis," published in the *Medical Record*, March 14 1898, and in THE JOURNAL A M A, Feb 5, 1898 In the absence of more effective means, I still hold to the same methods, for the reasons there given

The principle of the action of the pneumatic cabinet is correct, and indispensable in many cases, and should be applied where it is possible to obtain it, for it is a very difficult thing to wake up the almost paralytic chest muscles to perform their natural function, and is only obtained by persistent and continuous effort

I have observed a very great lack of appreciation among medical men of the importance of this fundamental symptom of the vesicular murmur, and many lives are irretrievably lost by neglect of the methods required for its restoration, which otherwise might have been saved by prompt and early mechanical expansion

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ON THE RELATION BETWEEN THE VARIETY OF MICRO-ORGANISMS AND THE COMPOSITION OF STONE IN CALCULOUS PYELONEPHRITIS

THOMAS R BROWN M D

BALTIMORE MD

No subject in renal diseases has been more discussed than calculus, especially as regards the etiologic factors involved in the production of the stone Many theories have been held regarding the origin of stone in nephrolithiasis, but of these most have been finally abandoned from insufficient evidence, thus the idea that telluric conditions play an important rôle in this connection has been practically abandoned by all, as also the belief that gout was the most important etiologic factor in the development of such a condition, while Senator, Von Noorden and numerous other observers have definitely shown that the method of living and the variety of diet play speaking generally, but a small part

Our ideas regarding the formation of uric acid in the body have undergone a marked change, through the work of Horbaczewski and Kossel, who showed that in a large number of cases, at least, the uric acid output was directly dependent on the amount of nucleins destroyed in the various vital and metabolic processes of the body

That, however, simply an increase in the uric acid output is in itself not sufficient to bring about calculus formation is shown in the first place by the fact that in childhood, when the uric acid output is extremely high, renal calculi are extremely uncommon, while in various conditions, pathologic and otherwise, which are associated with an extremely high output of uric acid such as splenomyelogenous leukemia, calculus formation is rarely met with Also in cases of experimental phosphaturia, we practically never meet with phosphatic stones

It will thus be seen that some other factor besides the formation of excessively large amounts of various of the chemical constituents of the urine is necessary for the formation of the different varieties of stone, at least in the great majority of cases This conclusion and also the discovery of an albuminoid center or nucleus in the case of a number of stones, has led some observers to believe that the stone is formed by deposition of some of the urinary constituents about a proteid mass made up of epithelial cells, pus cells, red blood cells, etc Comparatively recently, however, bacteria have been assigned an important rôle in this connection due in the first place to the frequent association of calculus with certain forms of renal infection, and in the second place to the demonstration of bacteria in the center of a number of renal calculi Thus, according to Harris, who has recently reviewed the subject, various micro-organisms have been found in the center of several renal calculi, by Galippe, in one case by Begoyne, and in an especially interesting case by Lenander, who demonstrated zoogleal masses of the colon bacillus in the center of a calculus composed of calcium oxalate and urates Harris himself also reports three cases in which cocci or bacilli or both were found in the center of uric acid calculi, in these cases, however cultures of the bacteria were not made, but their presence was demonstrated only by microscopic examination

In all the cases which I wish to report, careful bacteriologic examinations were made of the urine, while the chemical composition of the stone was definitely determined in every case by the qualitative methods of chemical analysis usually in vogue These cases, seven in number, were all those in which infection of the renal pelvis or the substance of the kidney was associated with the presence of stone, and in all cases except one the symptoms definitely pointed to the condition being unilateral, and this was subsequently verified by the bacteriologic, chemic and microscopic examination of the urine on either side The means of making this examination was as follows Through the cystoscope a sterile ureteral catheter with a sterile rubber cuff on its distal end was introduced into the ureter and, after the urine had been allowed to flow for a short space of time, the rubber cuff was withdrawn and a certain amount of the urine collected in a sterile test-tube from which, subsequently, the bacteriologic, chemic and microscopic studies were made This method absolutely eliminates any chance of contamination from the bladder or from external sources if carried out with rigorous care From the urine thus obtained, cultures were made upon agar plates and from the colonies that grew thereon the species of micro-organism was determined

by the usual methods As stated before, ureteral catheterization was practiced in all cases on the side which gave no symptom, and in all cases except one the urine from that side was absolutely normal, showing that the calculous pyelonephritis was unilateral while in the case of the infected side the urine always contained large numbers of pus cells and a smaller number of red blood and epithelial cells and a considerable amount of albumin, while the reaction of the urine from that side depended entirely upon the variety of micro-organism met with, being acid in the one case of calculous pyelonephritis due to the colon bacillus met with, and alkaline in five cases due to various micro-organisms which possess in a marked degree the ability to decompose urea These seven cases are therefore subdivided into 1, those where the urine from the affected kidney is alkaline and 2, where the urine is acid

WHERE THE URINE IS ALKALINE

Five cases have been met with and studied bacteriologically and chemically, in which the urine was alkaline while in one other case, although there had been marked urinary alkalinity at the beginning of the trouble the infection had subsequently died out spontaneously and the urine, when examined by us, was acid and sterile The history of the development of the infection in these cases is of extreme importance, in Case 1 the condition came on insidiously, without any apparent cause, and was subsequently followed by several typical attacks of renal colic In Case 2 the onset had also been insidious, while the only symptoms nt were dull pain in the back and right side for l years, and loss of strength and weight In Case , w ere the condition had lasted for over fifteen years, the etiologic factors had been quite obscure, the condition developing after a protracted anemia, the exact cause of which could not be definitely determined alough it was probably chlorotic in nature The symp- in this case had been pyuria and pain, first on side, subsequently on the right side also and mer case they became so great as to necessitate val of the kidney which was converted into a elonephrotic sac in whose center a calculus was In Case 4, five months after a difficult instrumental labor, the patient complained of severe pain in the right renal region, which had been constantly present ever since (3½ years) associated with occasional attacks of sharp pain In Case 5 the pyelitis was secondary to a cystitis occurring 2½ years after the development of the latter condition The symptoms were almost constant severe pain in the right renal region, ociated with a high grade of pyuria, while in the case, where the infection had spontaneously died the patient had developed an acute ammoniacal tis after severe instrumental labor thirty years ago, lowed shortly by symptoms of an infection of the left kidney, the urine remained alkaline or ammoniacal for many years, but for the past twenty years has been almost constantly acid although it still at times contains enormous numbers of pus cells as if from some large sac which occasionally empties itself The bacteria found in these cases were respectively as follows Case 1, B proteus vulgaris, Case 2, B proteus vulgaris, Case 3, a white staphylococcus which rapidly decomposed urea and liquefied gelatin but slowly, in Case 4, the same white staphylococcus just mentioned, in Case 5, the B proteus vulgaris, while in Case 6, as stated before, the urine was sterile

In all cases except one, nephrectomy was performed, the stone removed and the renal pelvis irrigated and drained, in the one exception mentioned several calculi were voided with the urine so that it was possible in all cases to make a careful chemical examination of the stone The chemical composition of the stone in all these cases was the same, the calculus being made up of the phosphates and carbonates of calcium and magnesium, although the proportion of the various salts differed in the different cases In one case, that of the calculous pyelonephritis due to the infection of the B proteus vulgaris, a culture was made under the most careful aseptic precautions from the center of the stone, and the B proteus vulgaris was obtained therefrom in pure culture, in another case microscopic examination of the center demonstrated staphylococci—in this case the renal infection was due to the white staphylococcus previously mentioned—while in the third case, that in which the infection began thirty years ago and in which the urine had apparently been sterile for upwards of twenty years, no bacterial center was able to be demonstrated In the other three cases the stones were not examined to see what was the exact condition present in their respective centers

In one case the diagnosis was made in a rather unique fashion Through the ureteral catheter there was injected into the renal pelvis of the affected side 15 c c of a 2 per cent solution of hydrochloric acid, which was allowed to remain in the pelvis between ten and fifteen minutes, it was then analyzed chemically when the marked amount of calcium, and magnesium phosphate and carbonate present showed that the pelvis contained a calculus of that composition

The condition in all these cases was, as far as could be judged from the careful study of the symptoms and the urine, one of infection of the kidney subsequently followed, sooner or later, by stone formation A consideration of the findings in certain of the cases warrants us in the belief that the nucleus of the stone was a zoogleal mass made up mostly of the micro-organisms causing the infection, while the constant alkalinity of the urine caused by the urea-decomposing power of the micro-organism furnish the salts necessary for formation of the stone

The extreme frequency of calculus in infections of the kidney brought about by such urea-decomposing bacteria is shown by the fact that, of all the cases of renal infection due to this class of bacteria, stone was found in all the cases but one which was an acute pyelonephritis of but two weeks' duration where obviously, sufficient time had not elapsed for the deposition of the salts necessary to form the stone

WHERE THE URINE IS ACID

Only one case was met with in which stone was associated with a pyelonephritis due to a micro-organism which retained the normal acidity of the urine This case was one of infection arising immediately after the formation of a uretero-vaginal fistula, which in turn had been produced by the trauma of a very severe protracted instrumental labor

The infection was due to the B coli communis and had been present for one year, the urine from this kidney was discharged entirely through the fistula, contained pus, blood and epithelial cells and considerable albumin and was always very markedly acid, from this urine a pure culture of the colon bacillus in considerable number was obtained There had been absolutely no symptoms of stone, but, following upon a careful vaginal and rectal examination, a small calculus was passed

through the fistula, the chemical analysis of which was a mixture of uric acid and urates the former largely in excess The consideration of this case makes it highly probable that the stone was formed definitely because of the urinary infection

Albarran has divided the cases of renal calculi into primary stones where the kidney is not the seat of infection and secondary stones where bacteria are found in the renal pelvis, according to this classification our cases fall into the second group, although recently many have ascribed to bacteria the formation of stones of the first group, believing that a renal bacteriuria furnishes the focus about which the stones are built

My series of cases, therefore, besides showing the definite relationship existing between the variety of micro-organism causing the infection and the chemical composition of the calculus, also adds more cases to the ever-increasing list in which to the presence of bacteria is to be ascribed the formation of stone, this is not only so in the case of renal calculi, but the causal relationship between bacteria and stone has been shown also in cholelithiasis salivary, lacrimal and pancreatic stones in rhinoliths and otoliths and various stones found in pathologic conditions of the respiratory tracts

1033 Cathedral Street

COMPLETE INGUINAL EXTRAPERITONEAL HERNIA OF THE BLADDER, RECOVERY

J F BALDWIN, A M, M D

Surgeon to Grant Hospital Fellow of the American Association of Obstetricians and Gynecologists Etc

COLUMBUS, OHIO

Mr D H, West Mansfield, Ohio, aged 51, 5 ft 6 inches in height and weighing 245 lbs, consulted me May 26, 1900 He stated that he had had an inguinal rupture for eight years, which he had been unable to retain with any form of truss Ordinarily he had been able to reduce his hernia, but it had now been irreducible for forty eight hours The day before he consulted his local physician, Dr Wanser, who administered an anesthetic but was unable to affect a reduction He stated that he had noticed many times that he was unable to empty his bladder completely without lifting up the tumor

The tumor was about the size of two fists and extended to the bottom of the scrotum It was somewhat oval in outline and conveyed a sensation of fluctuation It was tender and entirely irreducible Although he was experiencing some pain, there was no evidence of an intestinal disturbance I therefore explained to him that I thought the main mass of the tumor was omental in character, but that I should not be surprised to find his bladder involved I based this statement of the involvement of his bladder on the fact that he had to lift up the tumor in order to completely empty that viscus I advised immediate operation and assent was given He was admitted to the hospital and the operation made an hour or two later

I was assisted in it by my regular assistants, Drs Shepard and Chapman Dr Willey, of Baltimore, Md, being present The usual incision was made over the tumor, but this had to be somewhat longer than usual, owing to the great amount of fat which was present, an incision about 2 inches in depth being required to reach the external fascia The tissues were carefully divided until what corresponded to a hernial sac was opened This disclosed a fleshy mass adherent throughout The adhesions, however, were easily separated and the mass brought up into view The fluctuation which I had noticed and which I supposed was due to free serum in the hernial sac such as is usually met with in cases of strangulation, was now found to be inside the extruded mass Drawing the tumor down the finger was passed up to the neck when it was found that the extrusion had taken place apparently as in a direct inguinal hernia The ring being enlarged somewhat, and the finger passed through the diagnosis was arrived at very promptly that the projecting mass was practically the entire bladder since all that was left inside the pelvis was merely the neck The bladder walls contained a thick deposit of fat so that the entire thickness seemed to be about one inch

With a good deal of difficulty a pelvic receptacle was made by separating the peritoneum, and the bladder replaced The replacement was only accomplished with the utmost difficulty, owing to the large amount of adipose tissue present The patient was placed in the Trendelenburg position and so maintained for a considerable length of time before complete reduction was accomplished The opening was then carefully closed in layers with kangaroo tendon The hernial sac, which consisted merely of condensed connective tissue instead of peritoneum, was trimmed up and the fat brought together by plain catgut in two layers, with a subcuticular stitch for the skin The wound was then sealed with collodion and a spika bandage applied

Recovery was immediate and in every respect satisfactory The patient reported at my office four months later, when everything was found in normal condition, the tissues being apparently perfectly strong and firm

I have been able to find in the literature at my disposal but very little bearing on this most unusual form of hernia In the *Philadelphia Medical Journal*, of June 30, 1900, there is a synopsis of an article by E Martin in the *Deutsche Zeitschrift fur Chirurgie*, for February, 1900 In this Martin reports a case briefly as follows A man, 51 years of age, had had a hernia the size of a small walnut in the right groin for some eight years past, present only at intervals and always easily reducible Twenty four hours previously the hernia had reappeared, this time larger and irreducible the pain and acute symptoms led to the diagnosis of incarcerated omental or intestinal hernia At the operation it was found that the hernia consisted of a portion of the bladder which had been protruded extraperitoneally, and which was easily replaced after the constriction had been relieved The patient recovered Martin, in this article, has collected from the pages of literature nine cases of strangulated hernia in which, as in his own case, the bladder alone was involved In only one of these cases was a hernia of the bladder suspected before the operation was started, and it is plainly to be inferred from this report that in most of these cases, as well as in his own, the bladder was wounded before the mistake in diagnosis was discovered

According to Martin's article, therefore, my own case makes the eleventh to be recorded In my case, fortunately, the involvement of the bladder was suspected before beginning the operation and hence that organ was looked after

Cases in which the bladder has been involved in a hernia together with omentum and intestine are not so uncommon, but that the bladder alone should become extruded is certainly quite surprising and for that reason such cases are well worth recording In the case reported the thick deposit of fat in the bladder wall caused it to so closely resemble omentum that the surgeon unless on his guard, would more than likely have incised it

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Taxing Poisons —According to the *New York Times*, in an editorial with this caption Sir Michael Hicks Beach Chancellor of the Exchequer England has received a suggestion from the food reformers that a tax be laid on poisons found in food and drinks Arsenic in beer appears to be the main inspiration of the proposition Parliament has certainly deemed it of enough importance to create a government commission, much to the consternation of the brewers The value of the public laboratories is pointed out from the fact that the presence of arsenic in beer is a very recent discovery The combination of a tax and a benefit is a rare one, as maintained by the editorial in question, but the argument is advanced that not much aid would be given to the replenishment of the imperial coffers since what it was sought to tax would disappear "To smile but put the question by" virtually concludes the article, is the immemorial habit of a chancellor Reforms, however it may be added are seldom advanced when criticisms regarding methods become too rampant

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THE STATE OF THE CIRCULATORY ORGANS IN THE EARLY STAGE OF SYPHILIS

Syphilis is one of the most conspicuous illustrations of the anticipation by empiricism of science, for although we have now learned to recognize the disease from its manifestations, and to apply almost specific medication, we are yet without positive knowledge as to its causative agent It is, however, generally believed that this is a micro-organism, probably of vegetal origin, and that to the lodgment of this and the reaction thereby induced the local lesions are due, while the constitutional and remote phenomena are to be attributed to the toxic products of its vital activity Clinical observation has shown that the affections to which syphilis may thus give rise, directly or indirectly, are almost limitless, no system or organ or tissue being exempt An interesting clinical study of the circulatory organs in the early stages of syphilis has been made by Dr Karl Grassmann,[1] in the course of which 238 patients were examined, with the result of showing that the normal function of the heart in the secondary stage exhibits, in at least two-thirds of the cases, principally in females, disturbances varying between clinically slight abnormalities and marked insufficiency of the heart Such subjective disturbances as may be present are almost unexceptionally attended with objectively demonstrable deviations from the normal Derangement of the pulse is exceedingly common, especially arrhythmia, and abnormal frequency, in the direction of increase or diminution In 85 per cent of patients with disturbances of normal cardiac rhythm the heart exhibited other abnormal manifestations In addition to "nervous" disorders in cardiac action, actual neuroses of the heart—habitual bradycardia, tachycardia, angina pectoris—also occur in individual cases

Frequently in the early stage of syphilis the function and the nutrition of the heart-muscle suffer, as indicated subjectively by palpitation, etc, and objectively at times by slight, at other times by more marked, insufficiency of the myocardium A further sign of injury to the heart consists in the so-called accidental murmurs that are audible in about 40 per cent of the cases The weakness of the muscular wall of the heart results in a large proportion of cases presenting systolic murmurs in moderate, sometimes considerable, dilatation of the heart, involving almost exclusively the right side rarely both, exceptionally only the left ventricle The clinical picture of functional mitral insufficiency develops with relative frequency, and it is not rarely observed to disappear in the course of antisyphilitic treatment The changes in the size of the heart, equally with the murmurs, are of varying character, although often, like the disturbances in the pulse, they are constant Isolated cases suggest a possibility of the occurrence of fresh endocarditis, although the evidence is not complete Exacerbations of chronic endocarditis also appear to occur now and then in the early stage of syphilis Dry pericarditis was observed in one instance

In a small proportion of cases there is increased resistance in the peripheral arteries, even in youthful patients Nevertheless, in addition to syphilis, other etiologic factors capable of causing premature arteriosclerosis almost always play some rôle in this connection In no case was aortic insufficiency or evidence of aortic aneurysm observed The blood-pressure exhibits in almost all cases in the early stage of syphilis greater or less diminution, and exhibits variation in the course of mercurial treatment Reduction in arterial pressure is likewise a sign of relative functional insufficiency of the left ventricle, just as the dilatation frequently present is a sign of that of the right ventricle

Coincidently with the existence of symptoms of secondary syphilis the hemoglobin percentage of the blood is reduced in almost all cases, rarely in marked degree Such improvement as takes place occurs soon after administration of the first doses of mercury, while in the subsequent course, in some cases from the outset, further reduction in the hemoglobin takes place The changes in the condition of the heart are not to be explained by chlorotic changes in the blood of syphilitics, at least clinical observation discloses no relation between the two It is likewise beyond doubt that the various abnormalities in the function and the size of the heart are not attributable to the action of mercury, as they may occur before its administration On the other hand, it can be shown in many cases that the existing alterations in the function of the heart improve or disappear in the course of antisyphilitic treatment—from the slight disturbances in the pulse to functional valvular insufficiency

In the absence of other etiologic factors, and on the basis of the observations made, syphilis is to be looked upon as the primary cause of the cardiac disturbances, which exhibit an analogy with those observed in connection with chlorosis, anemia, etc, especially with regard to complete restoration to the normal It is certain that true combinations with ordinary chlorosis are also to be taken into consideration in explanation of the cardiac disturbances in the early stages of syphilis, in the majority, however, the syphilitic infection alone is responsible The manner in which this affects the nervous apparatus of the heart as well especially as

1 Deutsches Archiv f Klin Med, 69 B, 1, 2, 3, 4, H

the fibers of the heart muscle, whether indirectly by impairment of the nutrition of the entire organ, or indirectly through the toxic substances that are developed in the body as a result of the activity of the syphilitic virus, is at present beyond solution

STUDIES IN THE DIAGNOSIS OF BUBONIC PLAGUE

Since we know positively that bubonic plague exists in San Francisco and that there is a likelihood of cases appearing in other large cities—a likelihood which must not be neglected—our immediate interest in various matters relating to the diagnosis of this disease has been markedly quickened In the first place this fact stands out predominant namely, that the scientific diagnosis of bubonic plague rests upon the bacteriological examination, and no other diagnosis is acceptable in this case but one of scientific accuracy and positiveness When the plague appeared in Oporto in the summer of 1899, the Institute for Infectious Diseases in Berlin established a separate department for the study of the diagnosis of plague Needless to say all conceivable precautions were instituted against the possibility of accidental infections Courses in the diagnosis of pest have been given to physicians in order that there might be no lack of persons with practical experience in the bacteriological diagnosis of this disease Especially the morphology and the pathogenicity of the bacillus of plague have been studied In his report of the work of this department for 1899-1900, Kolle[1] refers to a number of interesting observations made during this period The polymorphism of the bacillus is emphasized, it seems that this organism is especially unstable as regards its form—so-called involution-forms, branching organisms, clubbed swellings, etc, appear with great ease Polar staining is always obtainable if the cover-glass preparations are brought into absolute alcohol for one minute and then rapidly dried before being stained with dilute aqueous solution of methylene blue Cultures of plague bacilli are liable to rather sudden attenuations of virulence Repeated passages through susceptible animals, such as rats, may restore the original degree of virulency Kolle found direct inoculations of the healthy conjunctiva with the blood of the infected animals the quickest and most reliable method to pass the bacilli through a series of animals

White mice die without exception when inoculated with an infected needle A hemorrhagic infiltration forms with swelling of the adjacent glands and septicemia About half of the mice fed with infected material died In mice the spleen is rarely enlarged in plague As in mice, rats that die after being fed with infected material show primary bubo in the submaxillary region as a rule A larger percentage of the rats so fed died of plague than in the case of the mice Hence it seems quite clear that rats may infect themselves under natural conditions by eating of plague cadavers

Guinea-pigs are also very susceptible to injection with the plague bacillus Minute quantities inserted within the peritoneal cavity cause fatal peritonitis Indeed typical infection of guinea-pigs follows the placing of bacillary material upon the shaved skin, redness develops and small pustules not unlike vaccine pustules form bacilli being present in the contents Soon the regional lymph glands swell and become hemorrhagic, a purulent cord seems to run from the infected area in the skin to the glands Bacilli are found in large numbers in the subcutaneous tissue, the glands, and the blood In the spleen and occasionally in the lungs white nodules appear, very much like tubercles, and composed of cells and countless bacilli In more chronic cases the centers of these nodules may disintegrate Older cultures with reduced virulence may produce a chronic productive process in the mesentery and peritoneum

Kolle and his associates determined this important fact, that for the demonstration of plague bacilli in various mixtures where but few may be present the placing of the material upon an area of shaved skin of guinea-pigs is the very best method Infection takes place even when but few bacilli of slight virulence are present Bacilli that are not pathogenic on direct injection into the subcutaneous tissue quickly cause fatal infection when rubbed into the intact and shaved skin of the abdomen This peculiarity may explain some things in the infection of human beings with pest

Cats also may be infected by eating material containing bacilli, and they may die from septicemia with primary bubo in the submaxillary region

Efforts to produce infection of rats by means of vermin, especially fleas of these animals, failed entirely in the hands of Kolle He is inclined to believe that the disease spreads among rats through the live rats eating parts of those dead from plague, but he finds the problem in regard to the fleas of sufficient importance to merit further investigation Studies in immunization are also under way

DEFORMING OR RHEUMATOID ARTHRITIS

The need for greater refinement in the classification of acute and chronic diseases of the joints would seem to be obvious, and there is not wanting evidence of healthy activity in this direction It would appear that in addition to acute specific infectious inflammation of one or more joints—which for the sake of convenience we may continue to designate "acute articular rheumatism"—there occur other joint-inflammations that result from infection with the causative agents of other diseases, as scarlet fever influenza, gonorrhea, smallpox, pyemia, etc Any of these articular affections may be followed by a chronic condition of the joints, and as to the propriety of designating them "rheumatic" there may be some doubt, although this chronic disorder may also be of insidious origin, apparently without antecedent local disease From this chronic affection of the joints that known as deforming or rheumatoid arthritis

1 Zeitschr P Hyg u Infektionskr 1901 xxxvi 397

differs in several respects, and it seems not impossible that more than one disorder has been comprehended in this designation In fact there has been distinguished from it a chronic disease of the joints that, although it presents certain superficial resemblances, differs essentially in beginning of the synovial membrane rather than in the articular cartilage

There are certain reasons for believing that deforming arthritis is, in some instances at least, a disease of nervous origin despite the fact that neither gross nor minute lesions of the nervous system have as yet been discovered Thus, atrophy takes place in the muscles related to the affected joints, and further, somewhat analogous lesions occur in connection with a number of diseases of the nervous system, such as tabes dorsalis, syringomyelia neuritis In further support of the view that so-called deforming arthritis may really comprehend several different conditions is the fact that while in general the disease is most obstinately unyielding to treatment, occasionally most brilliant therapeutic results are obtained, and in some cases these have been brought about by measures directed toward the spinal cord Thus, P W Latham,[1] in discussing this subject, cites a number of cases reported by Dr J K Mitchell in 1831, in which relief of arthritic symptoms supervening upon injury to the spinal cord was afforded by the application of from eight to sixteen cups and abstracting as many ounces of blood from the neighborhood of the cervical or lumbar enlargement, or if this failed by the application of blisters in the same situation Latham himself reports two cases of deforming arthritis in which great relief was obtained by continued counterirritation over the spine Dr Henry Tucker[2] has reported a case of deforming arthritis in which remarkably beneficial results were brought about by protracted treatment with superheated air, and Dr M G Tull[3] has recorded almost parallel results in a case treated by the application of cold to the spine The patient was an unmarried woman, 20 years old, who presented painful swelling about the ankles, with difficulty in walking, and deformity of the wrist-joints, which had resisted varied treatment including superheated air Dr Tull applied a long ice-bag to the spine, at first for two hours at a time, morning and evening, and subsequently for one hour twice daily Guaiacol carbonate, a preparation of lithium and a solution of iodin were also administered The improvement was quite remarkable, the patient regaining her power of locomotion and being practically restored to health A similar result was obtained in the case of a negro, 40 years old, who had been confined to bed for twelve months with pain, redness and swelling of the knees, wrists and ankles

In view of the hopelessness with which cases of deforming arthritis are ordinarily looked upon it would seem that a fair trial should be given to treatment by means of the application of counterirritants and other remedial measures to the spine Success in this direction would contribute to the establishment of the nervous origin of at least some forms of the disorder in question, and it can be conceived that it might further lead to the employment of the same measures in the treatment of other diseases both of the joints and of the spinal cord

1 Lancet, April 6, 1901, 998 Jour A M A, April 27, p 1213
2 Trans Phila Co Med Soc, Nov 1899, xx, No 8, p 273
3 Proc Phila Co Med Soc, 1901, xx, No 3, p 133

COMBINED MEDICAL AND SURGICAL CLINICAL INSTRUCTION

Although the didactic lecture must ever hold a distinct place in the medical curriculum it has already been in considerable degree superseded by clinical instruction While applied knowledge is what the student must ultimately have, it will be more useful and more productive to himself and to others for being based upon a sound comprehension and a clear perception of the underlying principles and from an appreciation of its relations to other subjects In the evolution of medicine into its various subdivisions it has been found that there are certain disorders that fall at one time or another into the field of more than one of the many specialties that have resulted from the division of labor, and it may be that medicine has thereby lost in profundity what it has gained in extent The process of disseveration having gone so far, the time now seems ripe for some attempt at a more intimate integration of the various branches of medicine This necessity seems already to have been appreciated, and it has been given expression to by the establishment within recent years of publications devoted to subjects that may be looked upon as occupying what has been designated the border-line between one and another of the departments of medicine In line with the same thought, combined demonstration in two subjects, for instance medicine and surgery, has occasionally been undertaken

There are a number of disorders that are better studied and the better treated for the conjoint observation of both a clinician and a surgeon, and the student will be the better instructed for having the affection presented to him in its entirety, from beginning to end Besides the relations of clinician and surgeon are thereby rendered more intimate and mutually more helpful, and each has increased his respect for the ability and the powers of the other Among diseases of the character under consideration, which from the present point of view may be looked upon as partly medical and partly surgical, are abscesses or suppuration or gangrene or perforation complicating acute or chronic infectious diseases, such as tuberculosis, typhoid fever, and appendicitis, the exanthemata, gastric ulcer, hydatid disease, abscess or tumor of the brain thoracic, abdominal or intracranial aneurysm, accumulations in serous cavities, diseases of the gall-bladder and the urinary bladder, as well as the kidneys, malignant disease of the viscera, etc

In a paper read before the Philadelphia County Med-

ical Society by Dr Robert G LeConte, one of the surgeons to the Pennsylvania Hospital, he related a plan that he and his medical colleague, Dr F A Packard, had carried out recently in a course of seven or eight lectures The combined lecture occupied the greater part of two hours a case or cases being exhibited, the etiology pathology, symptomatology diagnosis, prognosis, and the medical treatment being outlined by Dr Packard Then Dr LeConte discussed the surgical treatment, which he at once proceeded to carry out before the class If death resulted, the reasons for failure were pointed out and the anatomic specimens were demonstrated In this way both teacher and student obtained a complete clinical picture that was likely to remain fixed more permanently in the memory of each than the most lucid and interesting description Such a method of teaching is, of course, not universally applicable One difficulty resides in the fact that cases available for such conjoined treatment are not always to be had Some objection might be raised further on account of the additional time required of each physician, but this is an individual matter and those whose desire it is to give the best instruction from both the student's and the teacher's view-point will not consider the sacrifice of time entirely uncompensated From the pedagogic standpoint also the plan has everything to commend it, and so far as possible it should be amplified and its adoption encouraged

RATES FOR THE ST PAUL MEETING

Attention is especially called to the report of the Committee on Transportation, concerning the coming meeting of the ASSOCIATION, printed in the last and this week's issue of THE JOURNAL It will be seen that this year the ASSOCIATION has been treated in an unusually favorable manner by the various passenger associations, the Western having granted a rate of one fare and $2 for the round trip for its entire territory, and the Trunk Lines and New England Passenger Associations a rate of one fare and a third The rulings of the Central Passenger Association, as announced this week, have been changed and the more favorable rate of one fare plus $2 granted The time limits too are unusually favorable this year, extending to July 15, and so allowing ample time for the proposed excursion to the Yellowstone National Park immediately following the meeting It is still hoped that concessions will be made by the Trunk Lines and by the New England Passenger Association

WILD BEASTS IN INDIA

A correspondent of the *Indian Medical Record* makes a vigorous protest against the Indian Forest Department's regulations, under which the extirpation of the homicidal wild beasts that infect that country is made impossible He says the government forests and the game laws are practically responsible for the loss of thousands of human lives, and the ruin of cultivators all for the benefit of a certain revenue and the sporting proclivities of a privileged class Shooting privileges are strictly restricted and the consequence is the wild beasts multiply Owing to these laws he says some sections have become depopulated The cultivator must not kill the animals that ravage his fields or endanger his own life and destroy his domestic animals, therefore, villages are abandoned and become overgrown with jungle, thus increasing the evils There may be some reasons for forest preservation, but authorities who make and enforce laws that cost thousands of human lives needlessly, or for the sake of gratifying the sporting proclivities of a class, take upon themselves a serious responsibility The few thousand lives annually taken by wild beasts may be a very small proportion of the two or three hundred million of India's population, but there is no excuse for their loss if it is in any way due as charged to special regulations made for the amusement of a privileged class The Indian peasant needs protection against himself with his heathen zoophilism and it is a pity that his civilized masters should add to his perils for the sake of their own recreation

MENTAL CONTAGION

Every little while some non-medical authority propagates a theory as to the contagion of mental diseases, and this is sure to be brought out if an asylum physician succumbs to such disorder Association with minds diseased is then dilated upon and extensive generalizations are indulged in on very slim foundations As a recent instance of this may be mentioned an editorial in a yellow journal *par excellence*, in an interior city, on the alleged mental failure of a prominent ex-asylum superintendent The individual in question was over 80 years old and had suffered, we understand, from a shock of paralysis two facts which would probably sufficiently account for such failures in memory, etc, as actually existed, but the chance was too good to be lost and the usual commonplaces had to be indulged in in regard to the perils of association with the mentally afflicted and a moral drawn on the mental effect of associations generally About one person in about three hundred and fifty is insane enough to be counted as such in the general population, and a rigid drawing of the line would probably increase this figure It is extremely doubtful whether any much larger proportion than this could be found in those who are intimately associated with the insane, excluding, of course, relatives, and others who obviously share the same heredity and predisposition There is such a thing as mental contagion, it is notoriously marked in hysterical cases, but there is very little evidence of any real transmission of serious mental disease, simply as such, to persons of healthy mental organization and not possessing any organic predisposition or heredity The cause of insanity may be an infection, as is probably that of general paralysis or paresis which seems to be sometimes communicated from husband to wife, but the method here is not obscure and is purely physical In the ordinary use of language we can not speak of insanity as contagious These are commonplace facts, but the notion is occasionally in evidence even in medical journals and its correction is therefore not altogether amiss

DIFFUSE PAPILLOMATOUS GROWTHS IN THE URINARY PASSAGES

Busse[1] describes two examples of widespread tumor growth of histologically benign structure in the urinary tracts In one of the cases the history extended over a period of twenty years, periodical hematuria being the most striking symptom From the examination of specimens obtained by operation and also after death it was found that the mucous membrane of the pelvis of the right kidney, which formed a hydronephrotic sac, of the entire ureter and of the urinary bladder around the right ureteral orifice was the seat of extensive papillomatous proliferation of altogether benign character In the second case the history of bloody urine and of pain in the left renal region extended over a period of seven years There was a large hydronephrotic tumor of the left kidney, which was removed 4½ months before death Examination of the kidney removed at the time of operation and of the ureter and bladder after death showed extensive papillomatous growths throughout the mucous membrane of the pelvis of the left kidney, the left ureter, and the urinary bladder, with hydronephrosis In the bladder the tumor had become carcinomatous As far as the history of these two cases goes, and based upon the results of the examination, it is most reasonable to conclude that the hydronephrosis was caused by obstruction of calculi or by strictures There was in neither case any history of pyelitis or nephrolithiasis These cases appear to belong to that category of tumors in which whole organs, or even systems of organs, are involved, e g, the gastrointestinal tract, fibromas of the nerves, diffuse chondromas of the skeleton The disease is rare Busse mentions five other cases The cause is wholly obscure

"PARATYPHOID" FEVER — DISEASES CLINICALLY IDENTICAL WITH TYPHOID FEVER BUT CAUSED BY BACILLI OTHER THAN BACILLUS TYPHOSUS

Schottmuller,[2] in a series of sixty-eight cases of suspected typhoid fever whose blood he examined bacteriologically encountered five the blood of which contained bacilli differing in important characteristics from the bacillus of typhoid fever In all these cases there seemed to be no occasion for any reasonable doubt that the clinical diagnosis of typhoid fever was correct There was in no case symptoms nor signs incompatible with this diagnosis The general clinical picture was that of typhoid fever of various grades of severity The bacilli isolated from the blood, which did not contain typhoid bacilli, presented well-marked differences in cultural peculiarities from both B typhosus and B coli communis They produced gas in glucose media and slowly alkalinized litmus milk without causing coagulation It is concluded that the bacilli isolated can not be regarded as typhoid bacilli, nor as colon bacilli, but as occupying middle ground Typhoid serum did not agglutinate any of these bacilli which were promptly agglutinated by their own serums, the latter having, however, no effect upon typhoid bacilli, whereas colon bacilli were agglutinated Assuming that the foregoing observations are reliable—and observations of similar import are being recorded in various places—then it seems that not all cases clinically typhoid fever are caused by the typhoid bacillus The cases here referred to were sporadic cases and the mode of infection is unknown Schottmuller suggests the name "paratyphoid" ("paratyphus") for cases of this kind Future observations must show whether the familiar clinical picture of typhoid fever harbors various diseases of different etiology, and it is obvious that careful bacteriological studies are necessary in order to clear up questions of this nature It may be that when attention is turned toward this question close observations may detect differences in the clinical course of typhoid fever and "paratyphoid" fever

1 Virchow's Archiv, 1901, 164 119 132
2 Zeitschr f Hyg u Infektionskr, 1901, xxxvi 368

CONGENITAL ANOMALIES OF THE PANCREAS

The increased attention now being given to the pathological anatomy of the pancreas has served to create interest in the anomalies of this organ According to Glinski[1] developmental anomalies of the pancreas may be divided into three groups 1 The so-called pancreas minus, which consists of an accessory or supernumerary lobule connected with the head of the pancreas being separated from the latter by a more or less distinct constriction 2 Accessory pancreas, which is entirely separated from the main organ and generally situated in the wall of the stomach or intestine When located in the intestine accessory pancreas may occur in the walls of intestinal diverticula, which, in some cases at least appear to be dependent upon the accessory pancreas They should consequently be distinguished from Meckel s diverticula 3 Divided pancreas, produced by mechanical pressure especially by blood-vessels during development, the fusion of the separate evaginations of the intestine by which the pancreas is formed being prevented In this case either the head or the tail of the pancreas is partially subdivided and separated into unequal parts by blood-vessels, the smaller part being connected with the main pancreas by means of the duct In addition to these three main groups may be mentioned the unusual but exceedingly interesting anomaly of the pancreas known as annular pancreas—*pancreas annulare*—which is not discussed by Glinski, here the head of the pancreas completely surrounds the duodenum which passes through the pancreatic tissue There was a specimen of this anomaly exhibited by Hugo Summa of St Louis, at the meeting of the ASSOCIATION in Atlantic City, last June,[2] and more recently Dr Tieken, of Chicago, presented a specimen to the Chicago Pathological Society[3] Dr Tieken's specimen was remarkable for the fact that the encircling pancreas had caused an actual constriction of the duodenum, which presented a large fusiform dilatation above the point of narrowing Anomalies of the pancreas are consequently of practical as well as of anatomical interest As regards the genesis of the developmental anomalies of the pancreas, Glinski points out that pancreas minus, accessory pancreas, and pancreas divisum reproduce normal conditions in the lower vertebrates The anomalies are all explainable on the score of disturbances in the

1 Virchow s Archiv 1901, 164 132 146
2 THE JOURNAL, A M A, xxxv, 43 3 Ibid xxxvi 908

normal development of the three, possibly four evaginations of the intestine which fuse to form the pancreas the main mass being formed by the ventral evagination, the dorsal evaginations normally forming only the head The ducts of Santorini, which are found quite frequently in the head of the pancreas, may be regarded as remnants of the originally independent dorsal evaginations

THE INFLUENCE OF OPERATION PER SE

All surgeons of experience will have observed, and all readers of medical literature will be familiar with the fact, that not infrequently operative intervention is attended with results of a successful nature that can not be attributed directly to the measures practiced—in fact, sometimes only the preliminary steps are taken—but must be ascribed to some obscure action arising out of the exposure to light and air and other physical and mechanical influences or else they must be considered coincidental That such results are merely coincidental would seem negatived by the frequency of their occurrence, and for the present we must accept the fact and await the explanation Perhaps the most conspicuous illustration of the condition under discussion is the subsidence of the symptoms of tuberculous peritonitis after abdominal section, with or without considerable manipulation of the serous membrane or irrigation of the abdominal cavity. In the same way after operations on the skull for the relief of epilepsy in which no obvious lesion is found the attacks may for a long time remain in abeyance At times, also, the exposure of supposed malignant neoplasms that are found to be insusceptible of extirpation is sometimes followed by a cessation of growth and possibly a long period of latency Of this last condition a most instructive instance is reported by F B Jessett,[1] in which, following gastrojejunostomy for the relief of vomiting and other symptoms associated with the presence of a tumor the size of a small cocoanut completely occluding the pylorus and presenting the naked-eye appearances of a scirrhous carcinoma, the patient lived for eleven years, and on postmortem examination the tumor previously present was found to have disappeared The patient was a woman, 56 years old, who had lost flesh rapidly and had suffered from intense pain The tumor remained demonstrable for a long time after the operation though gradually diminishing in size Death resulted, as stated, after an interval of eleven years from apoplexy, and on autopsy the stomach was found to present typical hour-glass constriction about its center being adherent in this situation to the left lobe of the liver At the constricted portion of the stomach the opening between the two resulting pouches barely admitted one finger In addition to the communication artificially established at the operation the pylorus which was situated immediately behind the constriction was still patulous though somewhat constricted A somewhat similar case has been reported by Demoulin and Tuffier[2] in which a hard swelling as large as an orange and thought to be a malignant growth developed in the epigastrium On operation a tumor that felt like a fatty growth was found about the pylorus and the adjacent parts of the stomach, and gastroenterostomy was performed On the twentieth day after the operation the tumor could no longer be felt on palpation and the patient regained his usual health

1 Lancet April 6 1901 p 1005
2 Bull et Mém Soc de Chir de Paris.

Medical News.

COLORADO

Sufferers from tuberculosis are excluded from the public schools of the state by order of State Health Commissioner Clough, promulgated April 15

A "healer" of Denver, who claims kinship to Jacob and Moses, and the power to cure disease by sending "vibrations to any distance," recently pleaded guilty to improper use of the mails and was fined $25

Gross Medical College, Denver, held its fourteenth annual commencement exercises April 25, graduating a class of fifteen The doctorate address was delivered by Rev R F Coyle, on "The Making of the Twentieth Century Man"

ILLINOIS

Dr Charles E Crawford has been elected health commissioner of Rockford

Dr D M Landon, Burton, has been appointed surgeon of the Soldiers' Home, Quincy, vice Dr John J Golden, Mt Vernon

Dr Chauncey H Wilder, DeKalb, has been appointed first lieutenant and assistant surgeon in the National Guard, and assigned to the Third Infantry

The State Board of Health met at Springfield, May 11, and elected Dr Charles B Johnson, Champaign, president, Dr James C Sullivan, Cairo, vice president, and Dr J A Egan, secretary

Chicago

The proposed hospital for consumptives has received thus far for its building fund, $22,983 50

The Post Graduate Medical School has elected Drs Carl H Andersen and Gordon G Burdick associate professors of surgery

The Chicago Surgical Society gave a dinner in honor of A W Mayo Robson of Leeds, Eng, at the Chicago Athletic Club, May 15

The Chicago Eye, Ear, Nose and Throat College has moved into its new quarters at Washington and Franklin streets There is a commodious hospital and dispensary in connection with the college It is located centrally and hence has no difficulty in obtaining suitable clinic material

Dr William Osler Baltimore, Md, addressed the joint meeting of the Chicago Medical and Chicago Society of Internal Medicine May 15 on 'The Natural Method of Teaching the Subject of Medicine" The annual banquet was given in the Auditorium the following evening

Water Supply and Death Rate—It is hoped by the Department of Health that interest in the street watering proposition will not be allowed to die out From a sanitary standpoint running water is never wasted It is the great diluent and purifier and the more of it that runs through the sewers the better for the public health The comparison of Chicago's supply per capita with Boston's which has been made during the week, should be coupled with a comparison of the death rates of the two cities Last year the Massachusetts town which is cited as a model of sanitary development, had a death rate of 20 82 per 1000, Chicago's death rate, on the same basis, was 14 68 per 1000 or nearly 42 per cent less It is not claimed that this great saving of life was due solely to the abundant water supply, but it undoubtedly helps

Statement of Mortality—The deaths for the week ended May 11 were 471, equivalent to an annual death rate of 13 97 per 1000 The deaths of persons over 60 years of age were 109 Though there were 95 or one sixth fewer deaths recorded last week than during the week previous the death rate among the aged still remains abnormally high During the previous week the proportion of deaths among those over 60 years of age was 23 6 per cent of the total deaths, and last week it was 23 1 per cent This is an average of nearly 28 per cent. higher than the normal death rate for this age with the present constitution of the Chicago population With the increasing age of the popu

lation this rate also naturally increases, in 1890 it was 12 2 per cent of the total mortality, and ten years later it was 18 2 per cent—an increase of nearly 50 per cent, or an average of 4 9 per cent yearly But this increase is by no means uniform, the panic of 1893 increased the rate by 7 per cent, it increased abnormally during the Civil War and again after the great fire of 1871 There has never before, however, been such an increase as the present, and a glance at the causes of death shows it to be due to what have come to be called the group of "American diseases"—Bright's disease, heart disease and diseases of the nervous system, the result of the rapid pace of American life This is a matter over which sanitary administration has no control and the Health Department can only state the facts and point out the causes The deaths from violence were 30, of which 12 were suicides, and respiratory diseases caused 164 deaths, including those from diphtheria and scarlet fever

KANSAS

Dr Hubbard Linley Atchison has purchased a one seventh interest in the Central Medical College, St Joseph, Mo, and has been elected to the chair of abdominal surgery

Smallpox—Dr W B Swan, secretary of the State Board of Health has issued his smallpox report for April giving the total number of cases in the state as 1084, with 5 deaths

Dr John B Dykes, Lebanon, has been appointed a member of the Kansas State Board of Health, by Governor Stanley, vice Dr Samuel W Williston, Lawrence, resigned

State Board of Medical Registration and Examination—The governor has selected the following as members of the board from lists submitted by the State Medical Society Dr Samuel W Williston, Lawrence, for 4 years, Dr Orson F Lewis, Hepler, for 4 years, and Dr George F Johnston, Lakin, for 2 years

KENTUCKY

Dr W C Black, Barbourville, major surgeon of the Second Regiment, Kentucky State Guard, has resigned

Burglars entered the house of Dr J N McCormack, Bowling Green, May 8, and stole a valuable gold watch and chain

Dr W Ed Grant, Louisville has sailed for Europe, to be gone four months and Dr J Garland Sherrill, Louisville, will sail for Europe June 1 for a three months' tour

Banquet to Dr Hare—A banquet will be tendered Dr Hobart Amory Hare of Philadelphia, upon the occasion of his visit to Louisville, by the profession of the city He comes to Louisville upon the invitation of the Medico Chirurgical Society and will deliver an address

Medical Student Murdered—W L Royse, a member of the graduating class of the Kentucky School of Medicine, was fatally stabbed by the janitor of that institution on the afternoon of the 9th The janitor was intoxicated and noisy, an attempt was made by Royse to make him leave the building when, before the bystanders could interfere, he stabbed Royse in the breast, killing him instantly An examination by the coroner showed that the blade severed the arch of the aorta

LOUISIANA

New Doctors—The State Board of Medical Examiners held examinations, May 2 and 3, at Tulane Medical College, New Orleans, and granted licenses to practice to 70 of the 95 applicants

Dr Arthur Weber, New Orleans, who was recently elected a member of the City Board of Health, may be decided to be ineligible because there are already three physicians on the board and in the act creating the board it is stated that it shall consist of "five persons Three of the persons shall, if practicable, be duly registered and licensed physicians"

Tulane Medical College, the medical department of Tulane University, New Orleans, held its sixty seventh annual commencement, May 1 and graduated a class of 115 In honor of the fiftieth anniversary of his connection with the institution Dean Stanford E Chaille was made LL D In his address, Professor Chaille remarked that the medical and pharmaceutical graduates of the university numbered 3841, all but 768 of whom had been graduated during the time of his official service Hon Hannis Taylor, LL D, delivered the doctorate address on "The Relation of the Medical Profession to International Law"

MARYLAND

Baltimore

The State Board of Medical Examiners (regular) held its semi annual examinations in Baltimore, May 15 18

Maryland Medical College, the sixth of the medical schools of Baltimore to hold its commencement, graduated a class of thirty, May 15

Dr J B McCallum, of the Johns Hopkins Hospital, Baltimore, sailed for Europe, May 8, to pursue special studies abroad

Dr George W Todd has resigned as superintendent of the Peninsula General Hospital at Salisbury, but will continue as a member of the medical staff The directors are formulating a plan of reorganization to place the institution on a broader plane

Association of American Institutions for the Care of Feeble Minded Persons, representing all such institutions in the United States and Canada, held a three days' session in Baltimore, May 16 On May 17 the delegates were entertained at the Maryland Institute for Feeble Minded, at Owings Mills

Typhus Fever—Two cases of this rare disease were discovered in the city last week They were Lithuanians, and one died The disease developed at Sparrow's Point, a river suburb of Baltimore, and probably resulted from contact with some sailors who had visited there The cabin which they occupied was burned by the health authorities

MICHIGAN

Dr Frederick W Mann, Detroit, has been appointed surgeon in chief of the Michigan Central railroad, vice Dr Donald Maclean, resigned on account of ill health

Detroit College of Medicine held its thirty third annual commencement, May 9 and graduated a class of forty five Dr William M Donald, Detroit, delivered the address to the graduating class

A mandamus was granted by the supreme court compelling Dr Beverly D Harison Sault Ste Marie, secretary of the State Board of Health, to recognize the authority of the newly constituted State Board of Registration in Medicine

Dangerous Communicable Diseases—Including reports by regular observers and others, cerebrospinal meningitis was reported present in Michigan during the month of April, 1901, at 11 places, whooping cough at 25 places, diphtheria at 55, measles at 62, typhoid fever at 69 smallpox at 139, scarlet fever at 153 and consumption at 209 places

April Mortality—There were 2999 deaths reported as occurring in Michigan during the month of April, equivalent to a death rate of 15 3 per 1000 per annum This number is 489 less than the number reported for the preceding month and 47 less than the number of deaths returned for April, 1900 There were 497 deaths of infants under one year of age, 175 deaths of children aged one to four years, inclusive, and 884 deaths of persons aged 65 years and over Important causes of deaths were as follows Tuberculosis, 241, typhoid fever, 32, diphtheria and croup, 42, scarlet fever, 17, measles, 5, whooping-cough, 15, pneumonia, 361 influenza, 142, cancer, 101, accidents and violence 132 The principal decline for the month was shown in the deaths from pneumonia and influenza, which were considerably less than those reported for March Small amounts of decrease were also shown in the deaths from typhoid fever and scarlet fever. For the first time in some months, no death from smallpox was reported

MINNESOTA

Clinton Hospital was destroyed by fire May 2

St Luke's Hospital, Duluth has received a donation of $5000 from John D Rockefeller, and $1500 additional from the employees of the Mesaba road

A State Sanatorium Commission has been appointed by the governor to select a site for the new sanatorium It consists of Drs George S Wattam, H Longstreet Taylor, St Paul, and James L Camp, Brainerd

The Swedish Hospital authorities have accepted the plans offered by L A Lamoreaux in competition and will proceed at once with the erection of a hospital building at Eighth Street and Tenth Avenue, South, to cost about $40,000

Physician Arrested—For neglecting to notify the health authorities of a case of scarlet fever, a Minneapolis physician has been arrested, and an osteopath in the same city has been indicted for failing to report a case of smallpox, which he diagnosed as typhoid fever

NEBRASKA

Dr Joseph H Boyes Hebron, has been appointed city physician

Creighton Medical College, Omaha, graduated a class of twenty eight May 6 The doctorate address was delivered by Dr Walter O Henry

Bishop Clarkson Memorial Hospital for Children, Omaha has received a bequest of $3000 to endow a bed, from the estate of the late Maria Sheldon Scammon

NEW JERSEY

New Hospital for Insane—The new county insane asylum at New Lisbon is almost completed and the patients at Trenton will be transferred during May

The Children's Seashore House at Atlantic City will re open on June 1 During its incorporation it is stated that 22,000 patients have been cared for and have been admitted without regard to creed, color or nationality This institution is dependent for its support on voluntary contributions

Scarlet Fever in Pensauken—The health authorities of Merchantville are much exercised over the existence of scarlet fever in Pensauken township and it is feared that the disease will become more widespread unless the board of health of the latter place adopt more aggressive measures

Smallpox—Certain districts of New Jersey are at this time battling against smallpox For two weeks past its presence has been known in Gloucester At first the disease was pronounced chicken pox, but as the patient died, the nature of the trouble became manifest After the recognition of this case a search was made, and fourteen cases of smallpox found It is now stated that the initial symptoms and signs were those of chicken pox which caused it to exist for some time before steps were taken to prevent it from spreading It was decided to close the public schools as a precautionary measure As a result of this state of affairs in Gloucester every practicing physician was ordered to appear before the board of health to explain why he had not complied with the law requiring that such diseases be reported On May 8 two more deaths occurred from the disease, while 3 new cases were reported On this date 600 employees in one factory were vaccinated On May 6 three new cases of smallpox were found ten miles east of Vineland It is believed that in this instance the disease was brought from New York On May 4 a colored man from Haddonfield was taken to the Camden jail, where it was found that he was suffering from smallpox This created a panic among the other inmates which at this time has not entirely ceased The jail has been placed in quarantine The Camden City Medical Society, at its meeting May 7 passed resolutions commending the county physician and health authorities in their promptness in restricting the disease On May 10 no new cases had been reported The county almshouse and asylum at Blackwood has been placed under quarantine

NEW MEXICO

Dr J O Cobb, U S M H Service Alamogordo, has been ordered to San Francisco, Cal to make a report on bubonic plague

Delegates to Tuberculosis Congress—Governor Otero appointed the following physicians to represent New Mexico, as delegates to the American Congress of Tuberculosis, held in New York City May 15 17 Drs James J Shuler, Raton, John H Sloan Santa Fe, E B Shaw, Las Vegas, George W Harrison, and Francis Crosson, Albuquerque, C G Cruikshank, San Marcial, and George W Bryan Alamogordo Dr Crosson, Albuquerque presented a paper on "The Sanatorium Treatment of Tuberculosis in New Mexico

NEW YORK

Dedication of Sanatorium for Consumptives—On Memorial Day, Governor Odell Vice President Roosevelt, and other notable persons will assist in the dedication of the new sanatorium for consumptives belonging to the Montefiore Hospital This sanatorium will accommodate 150 patients, and will be free It is situated at Bedford Station, Westchester County

Broadcast Distribution of Samples—The Board of Health at Lockport is taking action against the pernicious traffic of leaving samples of dangerous nostrums at the doorsteps of houses Two deaths have recently been attributed to taking these samples A similar epidemic of sickness occurred among children in the east side of Buffalo, who ate sugar coated pills in large quantities thinking that they were candies

Buffalo

Dr W Scott Renner who has been in Berlin for the past two months, has returned to Buffalo

Dr William Warren Potter will deliver the doctorate address at the commencement exercises of the Hospital College of Medicine at Louisville, Kentucky

The anti expectoration ordinance prohibiting expectoration on the floors of street cars public buildings or in any public assembly place other than streets sidewalks or parks is now a law The maximum punishment is a fine of $100

Civic Sanitation—Health Commissioner Wende has addressed a communication to the police and to the medical profession of the city asking their co operation in maintaining a proper sanitary standard in the city during the Pan American Exposition, and to be on the alert for any contagious disease, especially smallpox

Dr Ebenezer Johnson s Grave—In connection with the disinterment of bodies from the old North Street Cemetery in anticipation of using the site for the erection of a state armory, it is a curious fact that there seems reason to doubt the location of the remains of Buffalo's first mayor, a physician, Dr Ebenezer Johnson A movement is now on foot for the erection of a suitable monument in his memory

New York City

Drunkenness in Bellevue—Although strenuous efforts are being made to reform the service at Bellevue Hospital drunkenness among the help has been unusually prevalent Since March 1, 173 have been discharged because of intoxication, out of a total of 562 employees It is asserted that sober, responsible help can not be secured for the ages paid—$10 to $12 50 a month

Smallpox on the Increase—Smallpox is rapidly on the increase in spite of the efforts of the Health Department In the first six days of May 107 cases were reported, and since that time there has been a daily average of a dozen or more cases During the entire month of April only 199 cases were reported Every section of the city is represented In addition, each ocean liner brings about 1000 immigrants, many of them Italians, and they are furnishing many of the new cases As a result of a general order issued by the chief of police all policemen in the city have been vaccinated within the last few days

New York University vs Loomis Laboratory—Judge Truax, of the supreme court, has handed down a decision which terminates the litigation that has existed since 1897 between the New York University and the Loomis Laboratory, or rather the "Medical College Laboratory" According to this decision, the University must transfer to the Medical College Laboratory property valued at $150 000 The New York University Medical College was established in 1841 and conducted independently of the University until the incorporation of the Medical College Laboratory in 1883 The new corporation carried on the school until Feb 8, 1897, when the property was deeded over to the university without conditions Judge Truax holds that the sole consideration for this transfer was the promise to leave the control of the school to the grantor, that this promise has not been kept, and that as a contract can not be repudiated and the one doing so keep what has been obtained under it the university must return the property The opinion also holds that the Loomis Laboratory now connected with Cornell University, is not held in trust for the New York University

OHIO

The Cincinnati College of Medicine and Surgery held its fiftieth annual commencement exercises May 1, and graduated a class of sixteen

Dr Phineas S Conner, professor of surgery in the Medical College of Ohio, and surgeon in chief to the Good Samaritan Hospital, has been appointed by the Superior Court a member of the Board of Trustees of the Cincinnati Hospital

Cleveland College of Physicians and Surgeons held its fortieth annual commencement May 1, and conferred degrees on fifteen Rev Morgan Wood, D D, in his address to the graduating class, reviewed the progress of medicine during the last half century

H M Hanna Research Fellowship—Mr H Melville Hanna, Cleveland, has given $12,000 to the Medical Department of Western Reserve University, the income of which is to be paid by the occupant of the fellowship, who shall devote himself to specific original investigation in physiology or pathology under the guidance and approval of the heads of those departments

Resignation of Dr Rutter—Dr H C Rutter manager of the Ohio Hospital for Epileptics Gallipolis has been requested to resign by Governor Nash It is reported that Dr Rutter's summary discharge of Dr Albert P Ohlmacher pathologist to the hospital, was the cause of this action on the governor's part Dr Ohlmacher, in a circular letter, asks the opinion of the profession of the state regarding the continuance of the work of the laboratory

has been given to the importance of physical training by the military authorities of foreign armies than by our War Department The author urges the establishment of special schools for the training of instructors in gymnastics and physical exercises and the appropriation or allotment of money for providing and maintaining an adequately equipped gymnasium at every military post Such preparation enables the soldier to undergo the fatigues and exposures incidental to active service with less risk of breaking down under them

The water supply, rations, clothing and equipments of the soldier are next considered The chapter on water deals only with the conditions met with in military practice Hence no space is given to slow sand filtration or to mechanical filtration with alum as a coagulant as methods of purification, these being of more interest to the municipal hygienist than to the military sanitarian, but the filters used by our troops during the Spanish American War, the Berkefeld, the Pasteur Chamberland and the Maignen filters are described and illustrated, together with the Waterhouse Forbes sterilizer now furnished to many of the commands on duty in the Philippines The ration is exhaustively discussed even to the cooking of its various constituents, particularly on field service and the subject is taken up from another point of view in a subsequent chapter on the hygiene of hot and cold climates Camps and their sanitary administration are well illustrated by diagrams and engravings of tents huts, latrines and crematories for garbage and excreta Posts, barracks, quarters and hospitals are also well illustrated by plans and engravings The description of the lighting, heating and ventilation of these buildings of their plumbing when connected with a sewerage system and of the ultimate disposal of the sewage necessarily loses much of the military tone as the principles and practice involved are the same in military as in civil communities In a valuable chapter on military morbidity and mortality and another on the diseases of the soldier, the experiences of our own army during the years of peace preceding the Spanish American war and during and since that outbreak furnish many of the illustrative statistics An excellent article on disinfectants and their use follows the discussion of the infective diseases Alcoholism, venereal diseases, insanity and suicide receive careful attention at the hands of the author who is, like most army officers, an ardent advocate of the recently suppressed canteen system It is not possible however, to do more than indicate he general scope and character of the work Captain Munson's work has been well done and his Hygiene will no doubt be a standard for many years to come to all American students of military sanitation for the experiences and statistics of our own army, so largely cited in the work, will appeal to them with greater directness and emphasis than similar data derived from British or other foreign sources The book has received the approval of Surgeon General Sternberg and has been adopted for use in the army

HUMAN PLACENTATION —An account of the changes in the Uterine Mucosa and in the Attached Fetal Structures during Pregnancy By J Clarence Webster, B A, M D (Edin), F R C P E, F R S E, Professor of Obstetrics and Gynecology in Rush Medical College, etc, with 235 Illustrations Cloth Pp 126 Chicago Price, $3 75 W S Keener and Co 1901

This work is a comprehensive study of the human placenta, and is based upon investigations conducted by the author during eleven years in the College of Physicians, Edinburgh, McGill University, Montreal, and Rush Medical College, Chicago, It covers a study of the uterus during the second, third, fourth, fifth sixth, seventh, eighth and ninth months of pregnancy, in the first and second stages of labor, in the third stage—removed by Porro Cesarean section—and during various stages of the puerperium In addition he has studied a number of complete abortions in the early weeks, as well as the placenta and membranes in the late months of pregnancy In order to investigate the mammalian relationships of the human placenta the uterus was examined in various stages of pregnancy, in the mouse, rat, rabbit, guinea pig, pig, sheep and cow The book is illustrated with more than two hundred figures, the great majority of which are reproduced from drawings and micro photographs by the author These illustrations demonstrate with accuracy the changes in the decidua and attached fetal structures throughout the greater part of gestation The descriptive part of the work consists of 126 pages, including the bibliography The press work and the reproduction of the illustrations—almost wholly by the half tone process—are quite satisfactory

This work forms a most substantial contribution to the interesting department of embryology, with which it deals and in which there exist such great differences of opinion It is believed that Professor Webster's interpretations of his results will go far toward the settlement of many of the disputed points, as for instance, that in regard to the origin of the syncytium, which is of special interest on account of its relations to the genesis of the so called "Deciduoma malignum " There seems to be little doubt but that syncytium as well as the cells of Langhans' layer are of fetal epiblastic origin The discussions of moot questions are all marked by a calmness and clearness creditable to the author's scientific spirit and learning This is consequently an example of a kind of book which we have entirely too few in this country, namely the scientific monograph As more extended scientific investigation is undertaken the need for this form of publication is sure to make itself felt It would be an undoubted gain for scientific medicine in America if our medical book publishers could see their way clear to undertake the publication of monographs as has been done and is being done so satisfactorily in Germany and other countries

Married

L E PARKER, M D, to Miss Dora Moss, both of Flora, Ind, April 30

J NUMA ROUSSEL, M D, to Miss Amelie Dugué, both of New Orleans, April 30

GEORGE E SHAMBAUGH, M D, Chicago, to Miss Edith Capps, of Jacksonville, Ill, May 1

EDWARD A BLOUNT, M D, Nagadoches, Texas, to Miss Minnie Lewis of New Orleans, April 23

CHARLES LOUIS FINCKE, M D, to Miss Mattie Ireson Brown both of Brooklyn, N Y, April 25

FREDERICK N C GERAULD, M D, Circle, Alaska, to Miss Huddleston, of Buffalo, N Y, May 7

HUGO A ENGELHARDT, M D, Houston, Texas, to Miss Elsie Tristram of Brenham, Texas, May 1

WILLIAM F MALONE, M D, to Miss Adelaide Peck, both of Milwaukee, Wis, at Chicago, April 30

JOHN A HARDY, M D, Fraeger W Va, to Miss Virginia T Armistead, at Williamsburg, Va, April 24

WILLIAM EDWARD ANDERSON, M D, to Miss Pearl Horton Venable, both of Farmville, Va, April 30

CORNELIUS ALLEN HARPER M D, to Miss Elizabeth Louise Bowman, both of Madison, Wis, April 22

Deaths and Obituaries

M Albert Rhoades, M D Jefferson Medical College, Philadelphia, 1868, assistant demonstrator of anatomy, Jefferson Medical College, member and president for 11 years of the Reading Board of Health, for twenty five years on the staff of St Joseph's Hospital, Reading, sometime president of the Bucks County Medical Society and a member of the Board of Trustees and Judicial Council of the Medical Society of Pennsylvania, died at his home in Reading, where he had practiced for more than thirty years, May 4, after an illness of three years, aged 54 years

Samuel Kuypers Lyon, M D, College of Physicians and Surgeons, New York, 1868, while in a New York street, on his way to make a professional visit on May 4, was seized with a hemorrhage and expired soon after having been taken into a physician's office He was for thirty years a surgeon of the

New York police department and a fellow of the American Academy of Medicine Besides being a member of the New York Academy of Medicine and the New York County Medical Association he was identified with many other scientific bodies

Harold Snowden, M D, died at his home in Alexandria, Va, from paralysis, May 4, aged 65 After graduation in medicine and a brief practice he began newspaper work in 1852 upon the Alexandria *Gazette*, of which he was editor at the time of his death During the Civil War he served as surgeon in the Old Dominion Rifles and later in the 17th Virginia Infantry Dr Snowden also served several terms in the Virginia Legislature

E Stanley Perkins, M D, University of Pennsylvania, Philadelphia, 1869, who had practiced for many years in Germantown a member of the faculty of the Medico Chirurgical College and an examining physician of the Philadelphia Pension Board, died at Germantown Hospital, May 6 after an operation for peritonitis, aged 56

George C Jarvis, M D, New York University, 1860 Surgeon of the Seventh Connecticut Infantry throughout the Civil War, for many years a consulting physician of the Hartford Hospital, and a member of the AMERICAN MEDICAL ASSOCIATION, died from pneumonia at his home in Hartford, Conn April 7, aged 67

David H. Bartine, M D, University of Pennsylvania, 1862, surgeon of the 114th Pennsylvania Volunteers in the Civil War, a prominent physician of New Jersey and president of the Board of Health of Merchantville died at his home in that place, May 3 from heart disease, aged 59

William W Walker M D, Tulane University, New Orleans, 1871, one of the early settlers of Schulenburg, Texas, died at his home in that place, May 5 from subacute peritonitis He was a member of the AMERICAN MEDICAL ASSOCIATION

Ephraim Lewis Warren, M D, Berkshire College, Pittsfield, Mass, 1848 who had practiced medicine for more than half a century in Massachusetts, a veteran of the Civil War died at his home in Melrose, Mass, April 27, aged 78

Abraham Deyo, M D College of Physicians and Surgeons, New York, 1851, and for many years a practitioner in Newburgh and Gardiner, died at his home in that town, May 4, after a long illness following la grippe, aged 71

Francis P Griffith, M D, Willoughby University, Willoughby, Ohio, 1845, who had practiced in La Grange, Ind, for many years, and was health officer of La Grange County, died at his home in that place April 29, aged 82

Elwin Humphrey, M D, Western Reserve University, Cleveland, Ohio, 1865, who had practiced for nearly forty years in Akron, Ohio, died from apoplexy at his home in that city, May 4 after an illness of two days, aged 72

Julius Boushey, M D, Medical College of Ohio, Cincinnati, 1874, for more than twenty five years a practitioner of San Francisco, died at his home in that city April 29 after a protracted illness, from lung disease

Marcellus A Alexander, M D, University of Louisville 1870, was found dead in his house in Okeene, Okla April 30 apparently from chloroform poisoning He was about 70 years of age

George Reid Dinsmoor, M D, Bellevue Hospital Medical College, New York 1865, died after a period of invalidism of twenty three years, at his home in Keene N H, April 28 aged 59

Orlando Mitchell, M D, Medical College of Indiana, Indianapolis, 1878, a prominent physician of Marshall, Ill, and a member of the board of pension examiners, died at his home, April 3

John Thruston, M D, University of Louisville 1855, the oldest native born practicing physician in Louisville, died in that city, May 2, after an illness of three years aged 75

Leonard H Coe, M D, University of California, San Francisco, 1896, of Fresno, Cal, died April 24, at Denver, Colo where he had gone in the hope of bettering his health

John V Martin M D formerly a practitioner of Washington, Iowa, died in the State Hospital at Mount Pleasant, Iowa May 2, after an illness of several months, aged 40

William C Harris, M D, Central College of Physicians and Surgeons, Indianapolis, 1881, died suddenly from apoplexy at his home in Roachdale, Ind, May 1, aged 73

Byron R Evans, M D, Starling Medical College, Columbus Ohio, 1898, died at his home in Shawnee, Okla April 28, from the results of a carbuncle on the neck, aged 33

Frank M Kirby, M D, Columbus (Ohio) Medical College, 1882, of Rockford, Ohio, died at a private sanatorium in St Louis, April 22, after a long illness

Selton W Stevens, M D, Jefferson Medical College, Philadelphia, 1894, of Scranton, Pa, died April 25, a week after an operation for appendicitis, aged 39

William Bovie, M D, University of Michigan, Ann Arbor 1858, died at his home in Augusta Mich, from pneumonia April 25, aged 73

Frederic Wyland, M D, Columbus (Ohio) Medical College, 1891, died at his home in Columbus, May 6, after a prolonged illness

William D Boozer, M D, University of Nashville, 1874, died after an illness of ten years, at his home in Hogansville, Ga, April 25

Felix G Brown, M D, Washington University, St Louis, 1868, died suddenly at his home in Hutchinson, Kan, April 30, aged 57

Tandy Allen, M D, for the last ten years a resident of Kona, Hawaii, died suddenly at his home in that place, April 11, aged 44

William M Brunt, M D, Kentucky School of Medicine Louisville, 1891, died suddenly at his home in Eddyville, Iowa, April 24

Francis T McIntosh, M D, Albany (N Y) Medical College, 1886, died at his home in Troy, N Y, May 5

Miles R Biggar, M D, Detroit (Mich) Medical College, 1883, died at his home in Detroit, April 30

Marion M Pafford, M D, Atlanta (Ga) Medical College, 1895, died at his home Cecil, Ga, May 6

Societies

COMING MEETINGS

American Medical Association St Paul Minn June 4 7
Medical Association of Missouri Jefferson City May 21 23 1901
Illinois State Medical Society Peoria May 21 23 1901
Medical Society of North Carolina Durham, May 21 23 1901
Connecticut Medical Society, Hartford May 22 23, 1901
North Dakota Medical Society, Fargo May 22 23 1901
Kentucky State Medical Society Louisville May 22 24 1901
Medical Society of West Virginia Grafton May 22 24 1901
American Laryngological Rhinological and Otological Society New York City May 23 25 1901
American Laryngological Association New Haven Conn May 27 29 1901
American Pediatric Society Niagara Falls N Y May 28 1901
American Gynecological Association Chicago May 28 1901
American Climatological Association Niagara Falls N Y May 30 1901
Association of Military Surgeons of the United States St Paul May 30 31 June 1 1901
American Academy of Medicine St Paul Minn June 1 3
National Con State Medical Examiners and Licensing Boards St Paul Minn June 3
Association of American Medical Colleges St Paul June 3
American Medical Editors Association St Paul June 3
Minnesota State Medical Society, St Paul June 3
Indian Territory Medical Association Vinita June 4 5
American Proctological Association St Paul Minn June 4 5
American Dermatological Association Chicago June 4 6
Rhode Island Medical Society Providence June 6
International Association of Railway Surgeons Milwaukee June 10 12
Medical Society of Delaware Lewes June 11
Oregon State Medical Society Portland June 11 12
American Medico-Psychological Association Milwaukee Wis June 11 14
Maine Medical Association Portland June 12 14
Massachusetts Medical Society Boston, June 12
Colorado State Medical Society Denver June 18
American Orthopedic Association Niagara Falls June 11 13

Medical Society of New Jersey, Allenhurst, June 25 27
Wisconsin State Medical Society, Waukesha, June 26

American Climatological Association—The Eighteenth annual meeting will be held at the Cataract House, Niagara Falls, N Y May 30, 31, and June 1, under the presidency of Dr Robert H Babcock Chicago The program will include the president's address and papers on

"Puerto Rico Its Climate and its Diseases," by Dr Charles H Alden, Assistant Surgeon General, U S A, Ret'd, "The Fevers of Florida," by Dr Frank Fremont Smith, Palm Beach, Fla, "Climatology of Augusta, Ga,' by Dr Thomas D Coleman, Augusta, "Remarks on the Climatic Influences of Newport, R I," by Dr W C Rives, Newport, 'Nantucket and the Ocean Climate," by Dr Harold Williams, Boston, Mass, 'Notes on the Climate of New York and New England," by Dr Guy Hinsdale, Philadelphia, Pa, 'Some Observations on Southern California," by Dr Samuel A Fisk, Denver, Colo, and Dr Norman Bridge, Los Angeles, Cal "Further Diagnostic Tests with Tuberculin," by Dr Edward O Otis, Boston, Mass, Two Cases of Aneurism of the Heart and one of Spontaneous Rupture of the Heart," by Dr R G Curtin, Philadelphia, Pa, The Association of Tuberculosis and Syphilis," by Dr F I Knight, Boston, Mass, 'A Case of Mechanical Obstruction of a Bronchus Simulating Rapid Phthisis," by Dr J B Walker, Philadelphia, Pa, 'Piece of Meat in Bronchus—Disappearance by Absorption—Recovery," by Dr Thomas W Harvey, Orange, N J "The Selection of Favorable Cases of Pulmonary Tuberculosis for Sanatorium Treatment," by Dr E R Baldwin, Saranac Lake, N Y, "The Carrying out of the Hygienic Treatment of Pulmonary Tuberculosis Outside of Sanatoria,' by Dr Charles L Minor, Asheville, N C, 'Devitalized air Toxæmia a Prime Cause of Tuberculosis," by Dr Charles Denison, Denver, Colo, 'Cases in which the Tuberculin Test seemed Justified and Decisive," by Dr W E Casselberry, Chicago, "The Home Treatment of Tuberculosis," by Dr Leonard Weber, New York City, The Home Treatment of Tuberculosis," by Dr Irwin H Hance, Lakewood, N J, 'The Importance of Early and Radical Climatic Change in the Cure of Pulmonary Tuberculosis,' by Dr Charles Fox Gardiner, Colorado Springs Colo Clinical Aspects of Spa Treatment," by Dr Beverley Robinson, New York City, "Analogous European and American Mineral Springs," by Dr Guy Hinsdale, Philadelphia, Pa, "The Relation of Sunshine to the Prevalence of Influenza," by Dr Howard S Anders, Philadelphia, Pa, 'A Case of Pulmonary Osteoarthropathy,' by Dr R C Newton, Montclair, N J 'The Physiological Influence of Climate on Nervous Diseases," by Dr F Savary Pearce, Philadelphia, Pa, 'The Use of Strychnia in Diseases of the Heart," by Dr Abraham Jacobi, New York City, "The Cause of Death in Aneurysms of the Thoracic Aorta which do not Rupture," with report of two cases, by Dr H D Arnold, Boston, Mass 'The Etiology, Pathology, and Clinical Aspects of the Bovine Heart," by Dr Leonard Weber, New York City, "The Hygienic and Mechanical Treatment of Heart Disease," by Dr Boardman Reed, Philadelphia, Pa A Case of Chronic Endocarditis by Drs Judson Daland and W D Robinson, Philadelphia Pa The Value of the Terms 'Cured,' 'Arrested,' and 'Improved in Relation to Pulmonary Tuberculosis," by Dr J Edward Stubbert, Liberty N Y "The Increased Corpuscular Count of the Blood at High Altitudes, Especially on Rapid Ascent," by Dr W A Campbell Colorado Springs, Colo, "The Influence of the Colorado Climate upon Pulmonary Hemorrhages," by Dr Sherman G Bonney, Denver, Colo, "Proper Definitions of the Terms Following Pre tubercular or Prebacillary Stage,' 'Incipient Stage,' 'Moderately Advanced Stage, 'Far Advanced Stage,' 'Improved Condition Arrested Condition,' and Cured or Apparently Cured Condition' as Applied to Pulmonary Tuberculosis," by Dr J Edward Stubbert, Liberty, N Y and "The Use of Guaialine in the Treatment of Pulmonary Tuberculosis," by Dr W W Bulette, Pueblo, Colo

Alumni Association of Creighton Medical College, Omaha, Neb—The alumni, at their meeting, May 7, elected Dr Edwin C Henry, president, Dr Rudolph Rix, secretary, both of Omaha, and Dr Adda G Wiley, South Omaha, treasurer

American Laryngological, Rhinological and Otological Society—The Seventh annual meeting of this Society will occur on May 23 to 25 in the New York Academy of Medicine, President Dr Robert Cunningham Myles, New York City, in the chair

American Orthopedic Association—The fifteenth annual meeting of this association will be held at Niagara Falls, N Y, June 11 to 13, under the presidency of Dr Arthur J Gillette, St Paul, Minn The sessions will be held in the parlors of the International Hotel

Cape May County (N J) Medical Society—At the annual meeting of this society on May 2 the following officers were elected Dr John S Douglass, Tuckahoe, president, Dr Joseph C Marshall, Tuckahoe, vice president secretary, Dr Nathan Cohen, Wildwood, secretary, and Dr Randolph Marshall, Tuckahoe, treasurer

Gulf Coast Medical Association—The most important business transacted at the annual meeting of this Society at Pass Christian, Miss, May 1, was the unanimous adoption of a resolution strongly protesting against the abolition of Dry Tortugas as a marine quarantine station

American Gynecological Society—The twenty sixth annual meeting of this Society will be held in the Fine Arts Building, Chicago, May 30 and 31 and June 1 Dr Eli Van de Warker, Syracuse, N Y, will preside, and Dr Fernand Henrotin, Chicago, will deliver the address of welcome

Denver Clinical Society—This Society, which is composed entirely of women, gave its annual dinner, April 26, at which Dr Mary Elizabeth Zakrzewska, Boston, the first woman to receive a medical diploma in the United States, was the guest of honor Dr Mary E Bates acted as toastmaster

Livingston County (Ill) Medical Society—This Society met for organization at Pontiac, April 27, and elected the following officers Dr James J Pearson, Pontiac, president, Dr Charles L Hamilton, Dwight, vice president, and Dr John Ross, Pontiac, secretary and treasurer

Alumni Association of the Detroit College of Medicine—At the annual meeting of this body in Detroit, May 9, Dr J E Davis, Detroit, was elected president, Dr T B Scott, Vernon, vice president, Dr George C Bassett, Detroit, financial secretary, and Dr Charles T Southworth Monroe, historian

Clark County (Ohio) Medical Society—The annual meeting of this Society was held in Springfield, May 2 The following officers were elected Dr Bennetta D Titlow, president, Drs Charles L Minor and James A Link, vice presidents and Dr William B Patton, secretary and treasurer, all of Springfield

Oklahoma Medical Association—The ninth annual meeting of this Association was held in Oklahoma City, May 8, Dr Charles W Fisk, Kingfisher, presiding Dr Reuben D Love, Perry, was elected president, Dr John H Scott, Shawnee, vice president, and Dr Eugene O Barker, Guthrie, secretary and treasurer

American Gastro Enterological Association—This Association held its fourth annual meeting in Washington, D C, May 1, and elected Dr John C Hemmeter, Baltimore, president, Drs William D Booker, Baltimore, and Samuel J Meltzer New York City, vice presidents and Dr Charles D Aaron, Detroit, Mich, secretary and treasurer

Maryland Alumni of Baltimore Medical College—The annual meeting and banquet of this Association took place at Baltimore, April 16 The following officers were elected Dr Edward L Whitney, president, Dr Gustav Goldman, vice president, Dr Thomas R W Wilson, secretary, and Dr James C Lumpkin treasurer, all of Baltimore

Alumni Association of University College of Medicine, Richmond, Va—At the annual meeting of this Association, held in Richmond, May 2 Dr Thomas M Lippitt, U S Navy, was elected president, Dr Charles R Turner, Richmond, vice president, Dr Roshier W Miller, Barton Heights, secretary and treasurer and Dr Marvin E Nuckols, Richmond, essayist

Linton District (Mo) Medical Society—The twenty ninth annual meeting of this Society was held in Mexico, May 7 when the following officers were elected Dr Arthur R McComas, Sturgeon presidents, Drs R Lee Alford, Vandalia, and Robert I Gibbs Hatton, vice presidents, Dr Edwin S Cave Mexico, secretary and Dr Martin Yates, Fulton, treasurer

Hudson County (N J) District Medical Society—At the annual meeting of this Society held in Jersey City, May 7, delegates to the State Medical Society and THE AMERICAN MEDICAL ASSOCIATION were appointed and the following officers elected Dr John C Parsons, president, Dr Henry H Brinkerhoff, treasurer, and Dr Charles H Purdy, secretary, all of Jersey City

District Medical Association of Central Illinois—The twenty seventh annual meeting of this Society was held in Pana, April 30, at which the following officers were elected Dr Thomas L Catherwood, Shelbyville, president, Dr Everett J Brown, Decatur and George W Fringer, Pana, vice presidents Dr John H Miller, Pana, treasurer, and Dr C R Spicer, Taylorville secretary

Association of Military Surgeons of the United States—This Association will meet in St Paul, May 30, under the presidency of Dr Alexander J Stone St Paul The Committee of Arrangements offers the following program of entertainment Thursday evening reception at the Aberdeen Hotel Friday evening, annual dinner at the Aberdeen Hotel, Saturday afternoon, carriage drive to Fort Snelling, Saturday evening, theater party at Metropolitan Opera House

Alumni Association of the College of Physicians and Surgeons, Baltimore, Md —The annual meeting of this Association was held in Baltimore, April 27, at which the following officers were elected Dr William J Todd Mount Washington president, Drs William Gombel and T S Lowry, Baltimore vice presidents Dr Charles L Black, Jr, Baltimore, treasurer Dr Harry Knapp, secretary, and Dr G W Roehrer, assistant secretary

National Confederation of State Medical Examining and Licensing Boards —This body will convene in St Paul June 3, and requests that every state or territorial board whose duty it is to examine or license physicians intending to practice in the jurisdiction of the board, by whatsoever name it may be called, affiliate with the National Confederation The meeting will be presided over by the president, Dr J N McCormack Bowling Green, Ky

Kansas State Medical Society —The thirty fifth annual meeting of this Society was held in Pittsburg, May 1, 2 and 3 Dr Lewis H Mann Topeka, was elected president, Dr James W Ryan, Coffeyville, vice president, Dr William E McVey, Topeka, recording secretary, Dr James W May, Kansas City, corresponding secretary and Dr William E Barker, Chanute, treasurer The Society decided to establish and publish a medical journal in Topeka, and to meet for the 1902 session at Lawrence

American Therapeutic Society —The annual meeting of this Society was held in Washington, D C, May 7 to 9 The following officers were elected Dr Reynold Webb Wilcox, New York City, president, Drs Howard H Barker, Washington, Thomas E Satterthwaite New York City, and Leon L Solomon, Louisville vice presidents, Dr Noble P Barnes, Washington, secretary, Dr William M Sprigg, Washington, recorder and Dr John S McLain, Washington, treasurer The Society will meet in New York City, May 2, 1902

Western Alumni Association of the University and Bellevue Hospital Medical College, New York —The first banquet of this Association is to be given this evening at the Sherman House, Chicago Among those on the program to respond to toasts are, Rt Rev Charles E Cheney, Mayor Carter H Harrison Drs James F Todd, Willis O Nance, Oscar A King, Joseph M Patton, and James G Kiernan, Chicago, Dr Charles S Bond, Richmond, Ind, Dr Charles C Hunt, Dixon, Ill, Dr Fred R Belknap Niles, Mich, Dr Edward W Jenks, Detroit, Mich, and Dr Edward T Laughlin, Orleans, Ind

Nebraska State Medical Society —At the annual meeting of this body at Lincoln May 7 8 and 9, the Society put itself on record as opposing the legalizing of the practice of osteopathy, and appropriated $200 to test the constitutionality of the law passed by the legislature, which allowed osteopaths a standing It adopted a resolution endorsing the proposed plan of reorganization as recommended by the Committee on Organization of the AMERICAN MEDICAL ASSOCIATION and instructed its delegates to assist in the movement A committee on organization of the profession in Nebraska was also appointed The following officers were elected Dr William B Ely, Ainsworth, president Dr Allen B Anderson, Pawnee City vice president Dr A D Wilkinson, Lincoln, recording secretary, Dr H Winnett Orr, Lincoln, corresponding secretary, and Dr J C Greene, Lincoln, treasurer

Ohio State Medical Society —The annual meeting of this Society was held in Cincinnati, May 8, 9 and 10 Dr Frank Billings, Chicago, and John A. Wyeth, New York City, delivered the addresses in medicine and surgery, respectively The election of officers resulted as follows Dr Edmund C Brush, Zanesville, president Drs F Gustav Zinke, Cincinnati Stephen S Halderman Portsmouth James C M Floyd, Steubenville and William S Phillip Belle Center, vice presidents, Dr James A Duncan Toledo treasurer, and Dr P Maxwell Foshay, Cleveland, secretary and editor

American Association of Life Insurance Examining Surgeons —This Association will hold its second annual convention in St Paul, Minn, June 3 one day in advance of the meting of THE AMERICAN MEDICAL ASSOCIATION The members of the Association who may happen to be in St Paul one day in advance of the meeting of that body are cordially invited to attend the meetings which will be held in the rooms of the Ramsey County (St Paul) Medical Society, Lowry Arcade, corner Fifth and St Peter Streets

American Medical Temperance Association —The tenth annual meeting of this Association will be held, June 5 at St Paul Minn The association now numbers nearly two hundred members, all of whom, with few exceptions, are members of THE AMERICAN MEDICAL ASSOCIATION This association was organized in Washington in 1891, having for its special object the medical study of alcohol as a medicine and its value as a remedy in disease Dr N S Davis, of Chicago, has been president from the beginning New studies of the effects of alcohol will be presented at the annual meeting by Dr N S Davis, the president, Drs Hall Madden, Crothers, Stuver, Grosvenor, Webster, and others The annual address will be delivered by Dr Dudley, the vice president

Mississippi Valley Medical Association —It is announced that the dates of the next meeting of this association have been changed from September 10, 11 and 12 to September 12, 13 and 14, because the dates first selected conflict with another large association meeting at the same place The meeting is to be held at the Hotel Victory, Put in Bay Island, Lake Erie, O, and the low rate of one cent a mile for the round trip will be in effect for the meeting Tickets will be on sale as late as September 12, good returning without extension until September 15 By depositing tickets with the joint agent at Cleveland and paying 50 cents, the date can be extended until October 8 This will give members an opportunity of visiting the Pan American Exposition at Buffalo, to which very low rates by rail and water will be in effect from Cleveland Full information as to rates can be obtained by addressing the secretary, Dr Henry E Tuley, No 111 West Kentucky Street, Louisville, Ky Those desiring to read papers should notify the secretary at an early date

Alumni Association of Albany Medical College —At the twenty eighth annual meeting of this Association the following officers were elected Dr Clarkson C Schuyler, Plattsburgh, president, Drs Israel S Buckbee, Fonda, Daniel S Cook, New York City, Nelson Everest, Gloversville and Robert B Lamb, Dannemora, vice presidents, Dr Andrew MacFarlane, Albany, secretary, Dr Robert Babcock, Albany, treasurer, and Dr Harry S Pearse, Albany, historian Dr Thomas D Crothers Hartford, Conn retiring president, recommended the establishment of a college for the advanced study of medicine "It is clearly evident" he said "that a college of this character will be established here at a very early day, and every graduate will rejoice in it and warmly welcome such a school for exhaustive study and personal research into the higher problems of medicine" Dr H Judson Lipes, of Albany, was awarded $100 in gold, the Clarkson C Schuyler prize, for the best essay written by a graduate of the college Four essays were submitted on the subject "The Influence of the Discovery of Bacteria to Disease on the Practice of Medicine Exclusive of Surgery"

American Medical Editors' Association —The annual business meeting of this Association will convene at the library rooms of the Ramsey County Medical Society, Lowry Arcade, St Paul, June 3 This Association, as implied in the name, consists of medical editors of the United States Meetings are held annually, coincident with THE AMERICAN MEDICAL ASSOCIATION The aims of this Association are the advancement of medical journalism, the foundation of an ethical press in medicine, and the improvement of the medical profession in general A partial list of papers to be read includes the president's address, Dr Alexander J Stone, St Paul, Minn, "Relative Value of Medical Advertising," Dr John Punton, Kansas City, Mo, "Improvements in Medical Education," Dr Dudley S Reynolds, Louisville, Ky, "Some Thoughts on the Ethics of Medical Journalism" Dr Burnside Foster, St Paul, Minn, "Editorial Corps and Medical Journalism," Dr George F Butler, Alma Mich, 'Relation of the Medical Editor to Original Articles," Dr Harold N Moyer, Chicago, and papers, subjects unannounced, by Drs John V Shoemaker, Philadelphia, and George H Simmons, Chicago

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ASSOCIATION OF AMERICAN PHYSICIANS

Sixteenth Annual Meeting, held in Washington, D C, April 30, and May 1 and 2

(Concluded from p 1340)

Uncomplicated Hemorrhage from the Pyothorax.

DR A JACOBI, New York City, reported the case of M C, 7 years old, who had been ill for about a month previous to admission to the hospital, complaining of a languid feeling, slight fever, lack of appetite, occasional cough and some pain the right lung and down to the fourth or fifth rib, with flatness over the base Puncture yielded pus The next day resection was in the right side of the chest There was marked dulness over

done and 500 c c of inoffensive pus flowed out unmixed with blood Thiersch's solution was used for injection, and it returned with a little bloody pus when all of a sudden it was followed by the flow of a large quantity of pure blood The cavity was irrigated and then it could be seen that the blood was oozing from disseminated tufts over the pulmonary pleura, some of these tufts were small, some quite large The cavity was packed with gauze and when it was removed two days later there was another slight hemorrhage, after which granulation went on in the usual way Search for malignant tumor was negative and there was no suspicion of tuberculosis Dr Jacobi said the case was unique in his experience and furnished an additional cause for hemorrhage into the pleural cavity A search of the literature had brought out no further information on the subject, no similar cases, and his surgeon friends had seen nothing of the kind

A Case of Pneumonia Complicated by Pseudomembranous Exudate on the Mucous Membranes of the Mouth, Tongue, Pharynx, Nares, Conjunctivae, Glans Penis, Anus, Etc, Caused by Diplococcus Pneumoniae

DR CHARLES CARY, Buffalo, N Y, reported this case, remarkable in the occurrence during the course of an attack of acute lobar pneumonia in a boy of 11 years, of a profuse pseudomembranous exudate upon nearly all mucous surfaces of the body open to inspection There was also evidence of extensive passive pleuritis and probably the involvment of the gastro intestinal tract throughout its entire length The affection terminated in recovery by lysis The pneumococcus was obtained in pure culture from the heart's blood, the organs and the exudate

Notes on the Relapsing Fever of Hodgkin's Disease

DR J H MUSSER, Philadelphia, reviewed the literature and called attention to the paper of Ebstein on chronic recurring fever, and to the article in Nothnagel's System, on the same subject Dr Musser reported two cases, the characteristics of which were attacks of fever lasting from eight to twelve days, and alternating with periods of apyrexia In both there was increase of the glandular swellings coincident with the fever which would rise rapidly to a great height, 105 or 106 F, and after ten days terminate by crisis In the second case cultures and inoculations failed to disclose the nature of the disease, but the patient now has pulmonary tuberculosis Dr Musser concludes that this form of fever is in all probability an expression of the glandular form of tuberculosis to which Hodgkin's disease probably belongs

The Acid Intoxication of Diabetes and its Relation to Prognosis

DR C A HERTER, New York City, spoke of the method of opposing the acids and bases as the best means of detecting the amount of acid in the urine As a clinical help, the detection of the nitrogen of ammonia was of much value, but not absolutely reliable He found that with the increase of organic acids, measured as oxybutyric acid, coma was imminent Crotonic acid was always present and there was an increase for days, weeks or even months before the onset of coma Coma develops if large amounts of oxybutyric acid persist, say quantities greater than 25 grams a day When the urine contains little or no trace of organic acids, there is little prospect of coma, though other troubles may present themselves

Metabolism in Diabetic Coma, with Special Reference to Acid Intoxication

DR E P JOSLIN, Boston, Mass, reported a case of fatal diabetic coma, and gave a detailed account of the chemical analysis of the urine from day to day, with special reference to the varying amount of organic acids

A Study of Bubonic Plague Based on the Outbreak in San Francisco

DRS L F BARKER, Chicago, F G NOVY, Ann Arbor, Mich, and SIMON FLEXNER, Philadelphia, presented this report

Dr Barker opened the discussion with a consideration of the clinical aspects of plague, stating that it belongs to the group of septicemic infections or diseases in which the causative agent can in very susceptible individuals produce a general sepsis without local lesion, but which in more resistant individuals gives rise to a disease characterized by local reaction without general sepsis The character of the epidemic in San Francisco was like that which has prevailed during the early stages of all other epidemics Thirty one cases were definitely proven to be plague, and twenty eight of these occurred among the Chinese The ordinary cases of plague begin suddenly, usually with a chill, with fever that increases rapidly but has a curve characterized by intermissions and irregularities, the patient is nauseated, severe nervous symptoms follow and generally within twenty four hours the bubo appears The course of the disease is a continuous and progressive failure until death occurs, being the fourth and sixth days The bubo develops differently from that accompanying venereal affections The size varies, being sometimes as large as one's fist and occasionally so small that it can not be discovered by inspection or palpation Buboes are most frequent in the groin, next in the neck and then in the axilla The two principal types of plague are the bubonic and pneumonic forms and a primary skin plague can probably be distinguished with a local lesion in the form of a carbuncle In addition to these there is the plague septicemia, which may be divided into primary and secondary forms clinically By the first is meant a septicemia produced by the entrance of the bacillus into the blood without the development of a bubo In the secondary form there is a flooding of the blood by the plague bacillus causing early death In the early days of an epidemic and again toward its close there are usually found a number of mild cases, the patients not being sick enough to prevent their walking about Such individuals are a source of great danger unless they can be isolated, for it has been proven that the urine and feces frequently contain the plague bacillus for as long as four or six weeks after apparent recovery The pneumonic form of plague is characterized by a very bloody sputum containing immense numbers of the bacilli

Dr Barker referred to the great importance of recognizing the first case of plague, and said that no disease is easier of diagnosis if one can take the proper steps This should consist in a bacteriologic examination of the sputum, the blood, the splenic juices and the bubo contents when present Serum diagnosis is unreliable, except to show whether or not an individual has had the plague He insists on the importance of regarding every case of fever occurring in a place where plague is suspected as being a case of plague until it is proven to be something else, and furthermore the importance of believing at such times that every cadaver is one of plague until it has been bacteriologically examined As to treatment, he said that if he should contract the disease himself he would promptly use the serum

Dr Novy considered the bacteriology of bubonic plague, reporting in detail the work done by the Commission in San Francisco to prove the nature of the disease seen there

Dr Flexner considered the pathology of this affection He said that the glandular enlargements can not be mistaken for those occurring in any other disease The bubonic condition is characterized by a peculiar hemorrhagic edema which is not limited to the gland, but involves its surrounding tissues for some distance and shows numerous foci of necrosis The enlargement is due to multiplication of the cells normally present in the gland, in addition to the edema, and to the enormous growth of bacteria which is greater than in any other disease with the possible exception of the skin lesions of leprosy The necrosis is due to the presence of toxins and bacilli in the blood vessels The pneumonia is usually lobular in character and the exudate contains enormous numbers of the bacilli making up a very considerable part of the material which fills the alveoli and produces the consolidation The changes in the spleen are those of acute splenic fever and the organ is enlarged ocasionally to five times its normal size

Dr Flexner said that he expects to hear soon that plague has disasppeared from San Francisco and that the statement when received will be reliable in that it will be based on bacteriologic demonstration, for the city and state authorities acting with the United States Government have carried out the recommendations of the Commission for the erection of a

public mortuary and for the establishment of a detention camp in which suspected cases will be kept under observation

Experimental Yellow Fever

DRS WALTER REED and JAMES CARROLL U S A, presented this report Dr Reed giving a detailed account of his recent work in yellow fever (THE JOURNAL, February 16), adding the histories of a number of cases not heretofore recorded As in the first instances however they show very definitely that the poison of yellow fever is carried in the circulation and can be transmitted from one person to another by mosquito inoculations or by direct transmission of the blood hypodermically

DR GEO M STERNBERG, Washington D C, referred to the importance of these demonstrations which have made clear a number of facts that have heretofore seemed contradictory For instance, ships arriving from Havana without any cases of yellow fever aboard would be unloaded by stevedores, a number of whom would soon develop the fever It is now clear how they succeeded in disinfecting such ships by sulphur dioxid The burning sulphur destroyed mosquitoes hanging about on the ships, whereas it could not have produced disinfection if it were necessary to penetrate the cargo This work also explains how yellow fever was contracted from passing ships with which no communication had been held Dr Sternberg referred to his own work in the effort to determine whether there is anything in the blood of yellow fever patients that would give the disease to others, and said that now that the intermediate host had been discovered he hopes it will not be long before the parasite itself is isolated

A Case of Malarial Nephritis with Massing of the Parasites in the Kidney

DR JAMES EWING, New York City, in his paper pointed out that microscopic examination of the kidneys of fatal cases of malaria yield evidence of three main types of acute renal lesions occurring in this disease 1 Acute degeneration of toxic origin, often reaching a degree in which exudation of blood serum into the tubules is added is responsible for the vast majority of the cases of albuminuria in malaria 2 An extreme form of acute degeneration with focal necroses which is seen in cases of hemoglobinuric malarial fever 3 Massing of parasites in the renal capillaries with extreme degeneration of parenchymatous cells hemorrhages and exudation into the tubules This is seen only in severe estivo autumnal infections

Septic Infection Through the Stomach and Duodenum

DR WALTER B JAMES, New York City, said that it is generally assumed that septic poisoning rarely takes place through lesions of the stomach and duodenum Influences that operate against such are the inhibiting effect of the gastric contents on bacterial growth and the effective protective mechanism supposed to reside in the liver and to operate on such elements as find their way into the portal stream The author was led to inquire into the subject through the occurrence in his practice of several cases in which the clinical picture, and in some instances the results of the postmortem, pointed to the existence of septicemia where it seemed probable that the portal entry for infecting organisms had been lesions of the stomach or duodenum Dr James reviewed the recent work to show that the evidence proves that the stomach and duodenum practically at all times contain large numbers of bacteria that are taken with the food and are in an active state capable of exerting their peculiar influences and producing a septic condition should a solution of continuity take place in the mucous membrane Illustrative cases were given to show that severe and even fatal septicemia may have its starting point in an ulcer or similar erosion in the mucous membrane of the stomach

Two Cases of Streptothrical Infection, One Bronchopneumonia, the Second Abscess of the Brain

DRS J H MUSSER and N B GWYN Philadelphia presented this paper The first case was one of bronchitis of several weeks' duration due to a mixed infection and terminating in bronchopneumonia the sputum showing micro organisms having the characteristics of streptothrix and also of the branching forms of tubercle bacilli Inoculations and cultures did not show them to be tubercle bacilli The second case was that of a young man in whom the clinical features of tuberculous tumor of the brain and meningitis were present There were no localizing symptoms The patient had epileptic convulsions, and, after an illness of one week died in coma The spinal fluid was negative At the autopsy a small abscess was found in the frontal lobe, which contained foul pus in smears of which the streptothrix was found

Report on a Chemical Study of the Tubercle Bacillus

DR E L TRUDEAU, Saranac Lake, N Y, presented this report An assistant of his recently started a chemical analysis of the tubercle bacillus and obtained some very interesting results He found the organism to be composed of about 30 per cent of wax, which is undoubtedly the part which takes up the stains The outside coating consists of cellulose, and he also found three proteids from which he separated a nucleic acid A coloring matter of light pink shade was obtained and he was inclined to believe that the products of the nucleo proteid are the active portions of the organism A glycogen was also isolated from the bacillus

To What Extent is Urine a Suitable Solid for Bacterial Growth

DR WM A PARK, New York City said that as the result of numerous tests it was found that the best growths occur in the neutral or slightly acid urines, but still there are certain urines that, without regard to the reaction will not permit the growth of any bacteria An effort was made to determine the amount of acid or alkali production by the bacteria The colon bacillus made some alkali in albuminous urines The staphylococci made more in diabetic urines, but the proteus made by far the most changing some decidedly acid urines in a few hours into alkaline solutions The practical bearing of this seemed to be that treatment might be aided in certain infections by keeping the urine decidedly acid

Orchitis Complicating Fever

DR F P KINNICUTT, New York City, said that Osler observed this complication in only two of his first 800 cases of typhoid Dr Kinnicutt reported two cases occurring in 889 typhoid cases at the Presbyterian Hospital Of the cases collected by Eshner, 35 occurred during the period of convalescence, and of these 13 went on to suppuration Six presented, on examination, the Ebert bacillus, and only one the presence of any other pyogenic organism Dr Kinnicutt concludes that it is a rare complication of typhoidal origin which develops late in the disease or during convalescence and terminates usually by resolution Suppuration occurs in 25 per cent of all cases Atrophy of the testicle is a rare sequence and death has not been noted

Notes on the Treatment of Some Forms of Cancer by the X Rays

DR F H WILLIAMS, Boston, stated that the risk of producing burns is greater when using the x rays for therapeutic than for photographic purposes, and their caustic action should be carefully guarded against The cases he reported have all been examined by pathologists first to determine their cancerous nature They consisted of epithelioma of the lid and hand and rodent ulcers The cosmetic results were excellent The treatment sometimes only requires a few exposurs, and it can be conducted without the patient leaving off his usual occupation The difficulties are that the apparatus is expensive and the treatment sometimes prolonged In reply to questions from Drs Bond and Peabody, Dr Williams said he believed it was the x rays and not the cathode rays which possess therapeutic value, and that the interposition of a cloth or any penetrable substance between the patient and the tube has no difference in the action of the rays

Osteitis Deformans

DRS F A PACKARD and J D STEELE, Philadelphia, presented this topic Dr Packard analyzed the 67 cases from the literature, showing the preponderance of this affection among males and its greater frequency in old age, together with the comparative infrequency of association with malignant tumors as contrasted with the usual text book statements He reported a case with the characteristic changes described by Padgett

The Spinal Form of Arthritis Deformans

DR WM OSLER, Baltimore, Md, thinks we should recognize clinically three different grades of this disease 1, the form occurring in young children, characterized by enlargement of the spleen and lymph glands, 2, the form in adults, characterized by atrophic changes, 3, the more characteristic form with the well recognized changes of the disease Sometimes all the joints of the body are involved and sometimes only a certain set of joints He referred to one case in his care where only the feet and hands were involved Dr Osler gave particular consideration to the form in which the spinal column is chiefly involved, and which has raised the question whether some of these cases are not due to diseases of the nervous system He does not believe they are separate and distinct diseases, but looks on them as a variety of arthritis deformans differing only from the other types in involvement of the spine itself, some ligamentous tissue and the posterior spinal nerve roots

Certain Trophoneuroses and their Relation to Vascular Disease of the Extremities

DR B SACHS, New York City, reviewed a special group of trophoneuroses heretofore generally believed to be due to changes in the nervous system, but in which careful examination of some cases had shown the trouble to have arisen in disease of the vessels rather than the nerves

Personal Experiences in Cases of Jacksonian Epilepsy, with Special Reference to the Question of Treatment by Operation

DR J J PUTNAM, Boston Mass considers this form of epilepsy to be the only one that warrants surgical intervention and he advises it although neurologists are more conservative on that point now than a few years ago A focal lesion is not always found, but even in such cases operation frequently does good, perhaps through production of an inhibitory effect and the breaking of a vicious circle

The Heredity of Appendicitis

DR F FORCHHEIMER, Cincinnati, Ohio reviewed at length the history of several families that exhibited genealogic charts to show the number of cases occurring in certain families and their evident inheritance

The Importance of a Recognition of the Significance of Early Tuberculosis in its Relation to Treatment

DR E L TRUDEAU, Saranac Lake, N Y, reviewed the history of his work at the sanitarium and the work of others to show that tuberculosis placed under treatment in its incipiency will give about 75 per cent of cures, whereas if these same patients are allowed to waste their opportunities for treatment until the disease is well advanced, a fatal outcome or a prolonged illness is almost certain He laid particular stress on carefully investigating every case that shows a persistent, though irregular, afternoon rise of temperature of 5 degree or more His experience has shown that the vast majority of patients seeking entrance to sanatoria apply too late to secure the best results, and he urges physicians in general to investigate their suspicious cases more closely, and to inform such patients of the nature of their disease so that they may secure proper treatment

A Study of a Series of Cases of Burns

DRS J G ADAMI and J MCCRAE, Montreal, presented this report on experimental work that agreed in every particular save one with that published by Bardeen, of the Johns Hopkins Hospital several years ago The authors did not find focal necrosis with the same regularity that Bardeen did, but the lesions were in all other respects similar to those of toxin infections

Election of Officers

The following officers were chosen Dr J C Wilson, Philadelphia, president Dr James Stewart, Montreal, vice president, Drs S Solis Cohen, Philadelphia, recorder, Dr Henry Hunn, Albany, N Y, secretary, Dr J P Crozer Griffith, Philadelphia, treasurer, Drs Frank Billings, Chicago, F P Kinnicutt, New York City, councillors, Dr Wm Osler, Baltimore, Md, member of the executive council of congress, and Dr F H Williams, Boston, his alternate

CALIFORNIA ACADEMY OF MEDICINE

Meeting, April 30, 1901

The president, Dr D W Montgomery, in the chair

Sacral Teratoma.

DR JAMES F MCCONE presented a case, as follows The fetus was one of twins Its parents were not consanguineously related, and neither had suffered from infective fevers The tumor grew from the post anal region, and was in no way intimately connected with alimentary canal, or with sacrum of coccyx The tumor was a flattened spheroidal mass 10 cm in diameter, 6 cm in thickness It presented microscopically many varieties of tissue, areolar, myxomatous glandular, nervous, muscular, etc One part of the tumor had the general structure of small intestine, with its mucous membrane, villi, lymphoid follicles, and muscularis mucosa

DR C A VON HOFFMANN also exhibited a teratoma arising from the superior and inferior maxillæ, tissues of the neck, and sternum Its largest circumference was 12 inches, and its circumference at its root was 11 inches The mother was a strong woman 29 years of age, who had had a normal confinement in 1887 The monstrosity presented was born in December, 1900 It interfered somewhat with the passage of the head through the pelvis, which required the assistance of forceps The placenta was small and normal, and the puerperium normal He examined her on January 30, and found involution complete

DR D W MONTGOMERY said that he had seen a very interesting case of teratoma some years ago in the practice of Dr McNutt, which differed from those usually seen in being malignant It was situated on the abdomen, and caused the death of its host They frequently appear at the sacral and occipital regions, which he thought were their most frequent location They have to do with the embryonic layers, and contain enormous numbers of tissues Some look like separate beings glued to the fetus born

DR MCCONE protested against the name of sacral being given to these tumors, for they are in no way connected with the sacrum It was the region where they appeared, and not the tissue of which they were formed, which had given them this name

DR H BRUNN said that teratomas of the sacral region were more common than the one exhibited to night by Dr von Hoffmann, those having the location of the latter specimen, being quite rare Sacral teratoma did not arise from the sacrum, but from the post anal region This one had no connection with the sacrum or the coccyx

Subphrenic Abscess

DR T W HUNTINGTON reported a case as follows "On April 17, 1901, the patient, A M F, was admitted to the Medical Service at the City and County Hospital, and the following history was recorded A male, born in Illinois, age 54, occupation canvasser Father died of tubercular disease Family history otherwise unimportant Uses alcohol and tobacco moderately Previous history insignificant Five days prior to admission was seized with violent cramps in upper abdominal region, attended by nausea Hypogastric pain continued, and was present at first examination There was persistent hiccough for first two days, which ceased spontaneously Bowels constipated, suggesting partial obstruction Pain gradually increased Heart seemed slightly displaced to the left Slight dulness at left apex Excursion of diaphragm not made out Liver dulness could not be outlined Spleen somewhat enlarged Urinary examination negative Leucocytes 6400

The patient was transferred to my service April 23, 1901 without definite diagnosis On examination the entire abdomen was found to be distended, tympanitic, and acutely sensitive Patient seemed to be in great pain, but painful area had no definite limits The distension over the region of the gall bladder was markedly greater than at any other point amounting to a positive elevation of the abdominal wall at that point Over this area there was tympanitic resonance which extended laterally to the axillary line From this point posteriorly there was dulness The temperature had ranged from 99 to 100 Pulse full, rapid and rebounding Leucocyte count

14400 Exploration was advised The patient consenting, chloroform was administered and a vertical incision was made on the outer side of the right rectus, below the costal margin On opening the peritoneum there was an escape of a considerable amount of gas This was followed by an outpouring of nearly three quarts of foul smelling rather thin pus The abscess cavity was irregularly defined, and its limits could not be definitely determined except by the examining finger After extensive irrigation which was repeated many times it was found that the pus cavity was bounded below by the transverse colon The entire outer surface of the liver was bathed in pus and a large amount escaped from the interspace between the stomach and liver The diaphragm was forced upward to the level of the fourth rib, and externally against the chest wall Thinking that there must be communication with the pleural cavity a small portion of the eighth rib was resected in the axillary line, but at once found the diaphragm lying against the chest wall, and apparently acting as a barrier This wound was accordingly closed The abscess cavity was then drained the original wound partly closed, and frequent irrigation of the cavity ordered Patient rallied fairly well Since the operation the temperature has ranged from 102 to 104 There has been a free discharge of pus The patient has taken nourishment and stimulants freely The diagnosis in this case was never made with any definiteness until an exploratory incision made a demonstration possible The presence of gas overlying the pus reservoir and crowding outward the containing wall, was a marked feature Probably a more careful examination of the patient in different postures would have suggested the presence of pus in large quantities, but the patient's condition was such as not to warrant prolonged examination The origin of the abscess is still a matter of some doubt From the first suspicions were centered upon the gall bladder, although the patient s history in no definite manner warranted this hypothesis Careful search was made during the operation for the gall bladder, but it could not be made out The sudden onset of the original attack furnishes some grounds for assumption of the presence of a perforating ulcer of the stomach pylorus or duodenum Subphrenic abscesses, or collections of pus within the lesser peritoneal enclosure may originate variously They may be primary, that is have their origin in lesions of the stomach, pylorus, duodenum, transverse colon liver, gall bladder, lungs, pleura, or pericardium Keen reports one case as probably originating in the spleen as a sequel of typhoid fever Osler and Lampe state that suppurative appendicitis is a frequent primary cause Secondarily this condition may result from septic foci in the liver, which are metastatic manifestations following infective processes in remote organs It seems probable that septic venous thromboses may occur in this locality outside of the liver, but this statement lacks confirmation on the part of observers In one of my own cases a subphrenic abscess occurred seven days after the evacuation of an appendicular abscess Surgical interference resulted in marked improvement temporarily, but the patient finally succumbed to a similar pulmonary involvement

Dr J H Barbat said that this case was of peculiar interest to him The gas having a fecal odor might suggest the probability of the abscess being an appendicular one Several years ago he had had subphrenic abscess in his own person which had been incised and drained, and enormous quantities of pus removed It had finally healed over, but some years subsequently, he had had a well marked attack of appendicitis His abdomen was opened and a much thickened and firmly adherent appendix situated behind the cecum, was removed These adhesions were very dense, showing they had existed for a long time It was his opinion that his previous abscess originated in the appendix

Dr H M Sherman said that he had seen an item within the last six or eight weeks in some journal, that subphrenic abscesses never follow appendicitis He was able to refute that statement, however, as he had just lost such a case He thought the presence of gas in Dr Huntington's case would suggest a perforation of the duodenum or stomach

Dr Philip King Brown said that he had autopsied two cases, one was a subdiaphragmatic and pleural abscess, following appendicitis and subsequently discharging through the mouth The other case had followed more directly Dr Huntington's report It was a case of duodenal ulcer

Dr Huntington in closing, said there was no history of appendicular involvement, he had eliminated that He had two theories to present as a cause, the first that it was a ruptured gall bladder, and the second, a perforation of the duodenum

Acute Nephritis with Syphilis

Dr D W Montgomery exhibited a patient who had had an acute nephritis in the early stage of syphilis The patient was an Irishman 49 years of age, and presented himself at the clinic with a very much indurated chancre on the belly in the median line, and just above the pubic hair, with immense swellings of the lymphatic nodules in both groins A few papules, some papulo squamous lesions, and a fading roseola of the skin There were mucous patches in the mouth, he was drowsy, had headache, and a coated tongue About the fifty second day from the first appearance of the chancre he presented himself with marked edema of lower limbs, scrotum, and lower conjunctival folds Urine was acid, specific gravity 1022, and large amount of albumen (one gram to the liter) Microscopic examination showed uric acid and oxalate of lime crystals, some pus corpuscles, hyaline, and granular casts The patient had not been exposed to cold, nor was he a drinking man He had not had scarlet fever, nor diphtheria, nor pneumonia and his heart and blood vessels were normal He had never had gonorrhea, nor any other trouble with his urinary organs previous to the nephritis attack He was sent to the Hospital where he remained about ten weeks, iodid of potash being continued in fairly large doses and on leaving, the urine was perfectly free from albumin and casts, nor have any ever been found since He had been under treatment for syphilis at the clinic, at intervals, until the present time This was an instance of acute nephritis occurring at an early stage of syphilis, and as he was not taking mercury at the time of the nephritic attack, and as he had since taken mercury without nephritis developing, it was clear that it was not mercurial nephritis Other causes, such as exposure to cold, rheumatism, and gout, being eliminated, the author was reduced to accept syphilis as the etiologic factor

X Ray Burns

Dr Montgomery also exhibited a patient who came to him in March, 1901, suffering from a large X ray burn on the belly, received the previous November, after an exposure of three sittings before a static machine There was an irregular shallow ulcer with inflamed borders and covered with a yellow leathery, tightly adherent coating, which was very painful and tender The patient said it had healed over a very considerable portion of its original area, but lately it had come to a standstill Various ointments and lotions had been used, and finally a 10 per cent solution of lysol, which was found to be best for the control of the pain

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DENVER AND ARAPAHOE MEDICAL SOCIETY

Regular Meeting

Dr H G Wetherill in the chair

A Year's Experience with Cataract Extraction

Dr Edward Jackson reported, in detail, seven cases of cataract extraction, and made the following conclusions All the cases may be classed as senile cataract, although two of the patients were under 50 In extracting nontraumatic cataract in young persons he has found the lens so soft that it could have been expelled through a much smaller incision Three of the cases presented mature cataracts, one even somewhat hypermature In three cases immature cataracts were extracted, in two vision was restored promptly, and in one not until a secondary operation had been done His experience with ripening operation has been favorable without exception But even if this were the universal experience, which it is not he thinks it very doubtful whether the ripening operation would be worth doing in any considerable class of cases The slight gain in the ease of extraction and brilliancy of

immediate result scarcely compensates for the additional period of waiting before the chief operation can be done The extraction of immature cataract and its advantages apply only where vision has been greatly impaired or lost in the other eye If in the other eye vision is normal or as good as the cataract extraction is likely to give, there is little reason for doing the operation before the cataract reaches maturity The chief positive gain from extraction of monocular senile cataract is from the increased field of vision, and in this way the patient is saved from the dangers of accident that attend one who is blind in one eye Besides, such cases will avoid the risks of hypermature cataract and of temporary blindness should the other eye become involved He regards a hypermature cataract as a serious complication—the capsule becomes thickened, thus increasing the difficulty of extraction and rendering a secondary operation necessary and more difficult In relatively young persons the cataract is quite white, making a very noticeable deformity He uses a simple dressing which consists of a small loose mass of absorbent cotton held in place by one or more strips of adhesive plaster extending from the brow to the cheek He has never seen any bandage that would retain the dressing with the same accuracy, with as little possibility of making pressure upon the eye, and as little chance of displacement or disturbance by turning the head on the pillow Expulsive intraocular hemorrhage following lens extraction is a rare but utterly disastrous accident In cases that seem to be in special danger of such hemorrhage he operates with the patient sitting up, and has kept them sitting up for several hours afterward A secondary operation was done in but three of the seven cases Cataract extraction has been less affected by the evolution of antisepsis than any other important surgical operation We must disclaim the possibility of making the operation absolutely aseptic, and yet is there any other surgical measure that can show a better record as regards infection? His experience with the operation seems to teach the lesson that the line is yet to be drawn between essentials and non essentials in the technique of aseptic surgery

DR G M BLACK said that instead of the adhesive plaster he uses isinglass plaster He removes the dressing on the second day, relying on Nature to effect the cure

DR JOHN CHASE is averse to the use of adhesive plaster, because he has seen several patients remove the bandage He prefers to operate on cataract cases at the home of the patient

Important Sequelae Resulting from Delayed Operation in Appendicitis

DR A S LOBINGIER said that much has been written in a disconnected way concerning one or more of the various sequelae which may arise from appendiceal infection, but a broad and comprehensive treatment of the subject has yet to be written The following sequelæ are on record, lymphangitis, lymphadenitis, especially of the mesenteric and retroperitoneal glands, venous thrombosis involving right or left iliac or portal veins, Douglas's, tubo ovarian, psoas, lumbar, perinephric, and subphrenic abscesses, septic hepatitis, cholangitis, and ulcer of the stomach with hematemesis, intrathoracic abscess, septic pneumonia, fecal fistula, intestinal adhesions, bands and obstruction, urethral obstruction and post operative hemorrhage

DRS WARREN, HALL, GRANT and PERKINS each reported cases of formation of abscesses in various organs following appendicitis, and expressed themselves unqualifiedly in favor of early operative interference

DR JOHN S MILLER said that surgeons may be divided with reference to appendicitis into a group of three Those who would operate early, possibly before pus formation has taken place, those who wait for Nature's efforts to wall off the general peritoneal cavity, and the class who endeavor to tide the patient over the critical period and do an intermediate operation, viz, between attacks, when there is least inflammatory condition present The two latter classes are faulty, in that theirs are the very methods which invite sequelæ He recalled a case in Professor Shuchard's clinic at Heidelberg, [illegible] ago, in which the abscess was simply opened and [illegible] he first sequel manifested itself a month later in [illegible]phrenic abscess, the second sequel a few weeks later in the form of a serous pleuritic effusion, in which streptococci could be traced

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MEDICAL SOCIETY OF RUSH MEDICAL COLLEGE

April Meeting

Tumor of Mediastinum

DR FRANK BILLINGS exhibited a patient with tumor of the mediastinum John J, aged 39, married, a laborer, presented himself as a private patient on January 23 His family history was negative His previous health had been good during his whole life, excepting an attack of bilious fever when 12 years of age He uses alcoholic drinks very moderately, also tobacco moderately He denied venereal disease

A year and a half ago the present illness began with sharp lancinating pain in the right upper chest This continued steadily, growing gradually worse until about three months ago, when he commenced having a sharp ache in the left upper chest This was aggravated by exertion and was especially bad at night This was accompanied with radiating pain in the left shoulder and down the inner side of the arm to the elbow The pain is worse when lying down It is also severe upon first moving about in the morning, but grows somewhat better after a little exercise He has a dry cough aggravated by exercise and the dyspnea of exertion The voice has never been changed in quality The appetite is capricious but the digestion fairly good The bowels are constipated

He was 6 feet in height, weighing 135 pounds—a loss of 35 to 40 pounds from his normal weight The skin was sallow and muddy, the general appearance one of cachexia The eyes were negative, also the larynx The superficial veins in the left pectoral region were dilated Expansion of the chest was limited on both sides and apparently due to want of muscular power The respirations were rather rapid and shallow The apex beat was visible and palpable in the sixth interspace in the nipple line Dulness extended from the right sternal border at the top of the second rib to 1 centimeter outside the left nipple and upward on the left side to the third rib No throbbing of the chest could be felt At the apex of the heart a soft systolic murmur was transmitted downward into the seventh interspace and in the axillary line No murmurs were heard at the base of the heart nor behind The pulmonic and aortic second sounds were equal and not accentuated The radial pulses were equal and synchronous, as were the carotids The pulse was 96 per minute and occasionally intermitted The lungs were negative, and also the abdomen The urine was normal chemically and microscopically The blood showed 4,200,000 red cells, 70 per cent of hemoglobin and 8500 white cells

This patient entered the Presbyterian Hospital on January 26, and many examinations have confirmed the finding named above Recently the radial pulses have been unequal, the left the smaller with the patient sitting or standing, but the [illegible] peared equal when he was recumbent With rest [illegible] he has become more comfortable until now he no lo[illegible] er from pain of any importance in the chest The pl[illegible] ings are, however, the same and an *x* ray photo sh[illegible] in the mediastinum just above the base of the heart [illegible]

The diagnosis of mediastinal tumor is based on th[illegible] the patient denies venereal disease, has a family of he[illegible] dren, his wife has never miscarried, and his disease [illegible] slowly progressive associated with loss of considerable accompanied with cachexia Furthermore, by the fact [illegible] spite of the pressure being great enough to interfere w[illegible] circulation in the vein and at a point which must be [illegible] transverse arch of the aorta and therefore near the re[illegible] laryngeal nerve and blood vessels of the left side, it h[illegible] produced a change in the pupils or larynx or pulse wh[illegible] would expect to find in an aneurysm of the same regio[illegible] the other hand, the patient has improved with a rest an[illegible] moderately large doses of iodid, so that there is a possib[illegible] aneurysm and the diagnosis of mediastinal tumor is th[illegible] tentative

Malignant Mediastinal Tumor

DRS E FLETCHER INGALS and OTTO T FREER presented

history and pathologic specimen of a case of malignant mediastinal tumor occurring in a man about 35 years of age The first symptoms, consisting of coryza and tickling sensation in the throat, had begun about four months before he came under observation Dyspnea began about a month later and had steadily increased At the end of two months there had been some swelling and congestion of the face, and he had first noticed distension of the superficial veins There had been no real pain When first seen the patient was strong and well nourished but the cough was very troublesome and the dyspnea alarming if he lay down for a few minutes There was dulness on the front of the chest over an area extending from the clavicles to the lower edge of the ribs, and laterally about three inches each side of the sternum, with flatness over the lower part of the right chest The fluoroscope revealed a dark shadow nearly corresponding to though somewhat larger than, the area of dulness The respiratory sounds were absent over a large part of the dull area and the lower part of the right side but nearly normal elsewhere There were tracheal râles indicating compression of this tube The superficial thoracic and abdominal veins were moderately enlarged and on stripping the superficial epigastric veins the blood was seen to be flowing downward because of obstruction of the superior vena cava There were a number of slightly enlarged inguinal and cervical glands and the left vocal chord was paralyzed in the cadaveric position

The patient grew steadily worse and died in about two weeks Postmortem revealed a large anterior mediastinal sarcoma corresponding closely in size to the clinical findings There were very slight changes within the abdominal cavity There was a large collection of serum in the right pleura, extensive adhesions of the left pleura and the heart and larger blood vessels together with the trachea were much involved by the tumor mass The very interesting pathologic changes were pointed out which revealed the causes of the symptoms which had been present before death

Calculi

DR ARTHUR DEAN BEVAN presented specimens of salivary stones gall stones pancreatic stone kidney stone, bladder stone and reviewed the points in the etiology pathology and natural history common to all of them He also briefly reviewed the histories of the cases from which the specimens had been obtained He stated that all true stones consisted of two substances of different origin, one the framework of organic material derived from the mucosa of the duct or reservoir in which the stone was formed, the second the crystallizable substances derived from the secretion of the gland in connection with this duct He believes that the essential cause of true stone formation in any position is a catarrhal inflammation of the mucosa of mycotic origin

In the case of salivary stones in addition to this essential cause i e mycotic infection there is occasionally found as a nucleus a foreign body which has worked itself into the ducts of the salivary gland The germs producing a catarrhal inflammation of the mucosa which lead to the development of salivary calculi gain access to the mucosa probably from the mouth through an ascending inflammation The finding of leptothrix and other germ forms by Klebs and Gallippe in salivary calculi seem to demonstrate this fact One can not exclude however, the possibility of such germs reaching the salivary glands and ducts through the circulation

In connection with gall stones the same etiologic factors are present The germs producing the essential catarrhal inflammation reach the mucosa of the bile-tract by an ascending inflammation from the intestines in some cases in others probably through the blood carried to the liver It is difficult to state which route is the more common as the germs usually found in gall stones the colon bacillus and the bacillus of typhoid may reach the bile tract by either route Foreign bodies are occasionally but very rarely here the nuclei of stone

In connection with pancreatic stone Dr Bevan stated that the etiologic moments are practically the same as in gall stone formation He called attention to the difficulty of diagnosing pancreatic stone and to the probability that it is more common than we have heretofore believed, also that it is probably an important factor in acute pancreatitis and fat necrosis The development of the surgery of the pancreas within the last few years makes us hopeful that in the near future we shall be able to diagnose and operate successfully for pancreatic calculi In 1895 when Charles F Parkes first suggested and planned choledochotomy, it seemed to the surgeons of that day as difficult an undertaking as the removal of a stone from the pancreatic duct seems to us to day, and yet choledochotomy soon earned for itself the position of one of the most successful and brilliant of surgical achievements

In demonstrating a number of calculi from the urinary tract, he stated that we had here, probably, again the same etiologic factors viz, a catarrhal inflammation of the mucosa of mycotic origin There can be no question that the germs producing this inflammation may reach the mucosa by ascending the urinary tract or may be brought to the kidney or bladder by the blood He believes the most common germ form here is the gonococcus which represents the first route, and the bacillus of typhoid and the colon bacillus both probably representing the second

The natural history and symptom complex is very much the same in all forms of calculi, they may remain for years innocuous without giving evidence of their existence, if they do give evidence of their existence, it is either because, mechanically from change of position or increase in size, they interfere with the patency of the duct or reach a point in the duct too small for their accommodation, as in the passage of a stone through the common duct or a stone through the ureter, or more frequently the cause of symptoms is the occurrence of a fresh infection of the mucosa—this infection favored by the presence of the calculus

The *x* ray is of great value in determining the presence of urinary calculi whether in the kidney ureter bladder or prostate This means of diagnosing has not as yet been satisfactory in determining the presence of gall stones excepting in a limited number of cases Within the last few years much brilliant work has been done in kidney stone surgery thanks to this means of diagnosis

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NEW YORK COUNTY MEDICAL ASSOCIATION

Annual Meeting held April 15

Parker Syms, M D, president

Adenoma Sebaceum Nevus Lateris Sarcoma Cutis

DR WILLIAM S GOTTHEIL presented specimens and patients The first was a rare form of adenoma most often found on the scalp The second growth was in the axilla of a boy of 10 years Microscopic examination proved the dark linear excrescences to be true nevus Two men with sarcoma cutis were also shown The lesions were particularly well marked and numerous on the lower extremities The microscope showed no evidence of tuberculosis The speaker said that under proper treatment with heroic doses of arsenic the prognosis in such cases is good

Diagnosis and Surgical Treatment of Prolapsed Kidney, with a Demonstration of a Simple Method of Examination for its Detection

DR AUGUSTIN H GOELET was the author of this paper He said that the condition was much more common than generally supposed because often overlooked in the defective methods of examination commonly employed According to his experience and that of others prolapsed kidney is found in one out of every four or five gynecologic cases coming under observation Of this number 50 per cent suffer from this dislocation of the organ The etiology is obscure The symptomatology is extensive and includes persistent intestinal distention gastric irritability, fatigue on slight exertion, dragging in the loins irritability of the bladder and occasionally attacks of acute pain simulating renal colic The examination should be conducted with the patient standing against a wall or table, with the body bent slightly forward rather than backward As

the patient takes a deep inspiration, the examiner grasps the loin just below the ribs with the thumb and fingers of the left hand, and then having drawn the skin tense by a downward motion of the right hand, this hand is used to push the displaced kidney, if there be such, upward against the left thumb Coughing sometimes facilitates these manipulations A distended gall bladder, an omental tumor or a mass of impacted feces may be mistaken for prolapsed kidney, but it should be remembered that the kidney is more movable than the gall bladder and less tender, that omental tumors are usually associated with malignant diseases in other parts, and that impacted feces may be dislodged by appropriate treatment Dr Goelet is of the opinion that the only proper treatment for such cases of prolapsed kidney as call for interference is the operation of fixation, and he looks upon this procedure as nearly devoid of risk and very satisfactory in its results The patient should be kept recumbent for three weeks after the operation

DR GEORGE TUCKER HARRISON said that in spite of the beauty of the method of examination just described, the physician would meet with many disappointments in diagnosis, particularly if he does not sometimes resort to ether narcosis He also deprecates the undue enthusiasm of the present day in regard to these cases and their management

DR J RIDDLE GOFFE said that for some years past he has made use of this method, which he learned from Dr G M Edebohls Like most other surgeons he favors operating so as to bring the substance of the kidney directly in contact with the muscle

DR GOELET said that his method differs essentially from that which he understood is employed by Dr Edebohls His results in the operations for fixation of the kidney have been just as good when he has not opened the capsule

Officers Elected

The following are the newly elected officers Dr Parker Syms, president, Dr Alexander Lambert, first vice president, Dr Francis W Murray, second vice president, Dr Ogden C Ludlow, secretary, Dr Charles E Denison, treasurer, Dr Charles S Benedict, member of executive committee

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JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY

Meeting held April 15

Dr William H Welch in the chair

The Parasite of Cancer

The meeting was given up to an exposition by Dr Harvey R Gaylord, chief of the New York State Cancer Laboratory at Buffalo, N Y, of the organism which he believes to be the cause of cancer The address was illustrated by drawings on the board and by lantern projections on the screen Dr Gaylord began by telling of the inception of the laboratory—the only one in the world exclusively devoted to the study of cancer—through the assiduous efforts of Dr Roswell Park, who, being convinced by his personal experience that cancer is due to a parasite, induced the legislature of the state to make an annual appropriation Three years ago Dr Gaylord was placed in charge of the scientific part of the work At that time fresh cancerous tissue was inoculated into the jugular vein of a dog Twenty two days later the animal died, when a distinct cancer was found in his lung San Felice at this time arrived at the same result and cultivated a yeast as the cause Russell and Plimmer, of England, did the same thing, and by injecting the culture into a dog caused a growth resembling a cancer But upon repeating the experiment very many times these observers invariably failed to get the growth In the one case they had succeeded in cultivating a yeast contamination Repeating their experiments Dr Gaylord proved the difference between their yeast protozoon and the true organism of cancer The latter has a distinct cycle of development, slightly analogous to the plasmodium malariæ, but precisely like the vaccin organism, i e, it passes through seven stages In its first stage it can not be distinguished from the cocci In its highest form it has ameboid movements and appears like a leucocyte except that it has in it a number of hyaline bodies resembling fat, but not true fat because not dissolved by ether or staining in osmic acid These hyaline cells rise to the top in a hanging drop, owing to their low specific gravity By injecting into the cornea of a rabbit, it is found that the cancer protozoon and the vaccin bodies develop alike, but the former more slowly Dr Gaylord's method is to take the fluid from the abdominal cavity of patients operated on for cancer This gives a practically pure culture of the protozoon, mostly in its hyaline form One or 2 c c was inoculated in 100 animals, dogs, rabbits, guinea pigs and mice and the same organisms were recovered from the various organs of the animals in every case examined In 12 of the animals distinct cancers were formed He thought that the amount of infectious material was too great for the animals in the other cases and they died from acute cancerous infection Bacteriologic examinatons were made in every case with negative results Dr Sjoebring, of Lund Sweden, has succeeded in making a medium of human fat on which the protozoon grows and when inoculated into animals produces cancers Toward the death of a person with cancer these bodies are found in the blood Injected into animals, they may be recovered and reinjected indefinitely In a piece of cancer dried for four months infection resulted on its injection

Pfeiffer described this protozoon as the cause of cancer as far back as 1891, and has recently reached precisely similar results to Gaylord s, but by different methods Sjoebring has also stated observations precisely similar These observers, with Plimmer, San Felice, Funk, Eisen, of San Francisco, and others, deserve as much credit as any one, he said

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PHILADELPHIA PEDIATRIC SOCIETY

Meeting held April 16

President Dr T S Westcott in the chair

Indigestion in Infants

DR L EMMET HOLT, New York City, by invitation, read a paper entitled "Some Forms of Indigestion in Infants, and Young Children, with Special Reference to their Dietetic Treatment '

The speaker stated that the chronic forms of indigestion in children required most attention on the part of the physician In the majority of instances it is the method of feeding that determines the degree of digestion Much harm to the digestive powers of the infant occurs during the first few days, and frequently when the infant is turned over to the physician a considerable period may be required to correct the dietetic errors already committed As to the milk to be employed, he prefers percentage milk feeding A common formula would be 1 per cent fats, 6 per cent sugar, and 5 per cent proteids With proper food the child should not suffer from colic, but should gain rapidly in weight Infants frequently suffer from constipation, which in itself should not always be considered harmful The use of purgatives for the purpose of controlling constipation frequently sets up a diarrhea which does more harm than the original trouble In many instances it may be necessary to begin artificial feeding within the first twenty four hours Rarely has gastric dilatation anything to do with the existence of constipation in children Few things are more irritating to a child's stomach than the organic acids—butyric—found in milk, when in abnormal amounts In some instances it requires the addition of 25 per cent of lime water to neutralize the excessive acidity Frequently stomach washing is demanded and it is surprising to find such large quantities of mucus as are at times present in the stomach of young infants Within the first few days, if vomiting be severe, often all that will be required is the administration of bicarbonate of soda in very weak solution In one instance he gave barley water to a patient in whom indigestion had been pronounced, and with relief of the symptoms within twenty four hours The carbohydrates in this instance probably inhibited the development of acid fermentation In some cases, when death occurs from apparent toxemia, the micro organisms may not be found in the milk but may exist in the child In one such instance the stomach was irrigated, and rectal feeding enjoined, with relief of this condition

In some instances indigestion occurs with wet nursing In one he found that the nurse's milk contained an excessive quantity of fats Drawing the milk, skimming, and the addition of lime water gave good results Later the child was applied to the breast with rapid gain in weight In inanition there is a great reduction in the amount of chlorids excreted In instances in which diarrhea, greenish stools, fever and exhaustion are seen the milk may often be diluted so that the fats equal about 2 per cent. and the sugars 50 per cent with immediate relief When one kind of milk persistently disagrees with a child a change of food is indicated In some cases it is best to take the child off of cow's milk entirely and give denatrimized or farinaceous foods Rickets and scurvy may result from improper feeding In some cases rectal feeding is of great importance In such cases from 1 to 1½ ounces of peptonized milk may be given In case of eructation of sour food rectal feeding may relieve the condition Frequently the addition of a small amount of brandy to the peptonized milk may do good

Sometimes dilution of the milk to reduce the fats is the very worst thing which can be done Dr Holt instanced a case in which this caused harm and when the child was given milk with a very large amount of fat it thrived best Each case demands a separate line of treatment We must not be wedded to any one special line Frequently the very opposite will prove the best.

DR J P CROZER GRIFFITH expressed belief that the good results Dr Holt always obtains are in part due to his close attention to the smaller details of infant feeding, and the close watch he keeps on the life of the patient One should always personally inspect the napkins of infants when faulty digestion is present We must not leave too much to the nurse The proper system of feeding in great part depends on a correct insight into the condition present As to the correction of constipation, it is usually best to let it alone rather than give a medicine and cause diarrhea

DR E E GRAHAM has seen good results follow when cow's milk was prohibited and albumin water or broths given The peptonization of milk is probably not resorted to as frequently as it should be Rectal feeding is frequently a valuable aid

DR FREDERICK A PACKARD was glad to note that the speaker was not inclined to lay stress on the subject of bowel washing which some advised being done every few hours

DR D J M MILLER was impressed with the importance of proper feeding within the first twenty four hours after birth Milk mixtures, when too much diluted, may not always be borne best

DR J MADISON TAYLOR thinks much depends on the adoption of common sense rules

DR ALFRED STENGEL believes that we have hardly reached that stage when the subject of infant feeding can be spoken of as depending absolutely on definite fundamental principles We attempt to compare the results obtained in the case of diseased conditions with those prevailing during health In his opinion probably the good results achieved in correcting the diet of adults depend not so much on the special kind of food but on the amount of it In some instances this rule holds good in the case of children He has frequently found that, by reducing the fats and proteids and increasing the carbohydrates, disagreeable features subside In other cases he has found that lavage gave tolerance to a special kind of food when not previously well borne

DR T S WESTCOTT spoke of a case in which cream had not been well borne In this instance he could not give even a few drops of cream but the same percentage of cream, when given as part of milk, was well borne Later the cream could be gradually increased

DR HOLT in closing stated that he does not approve of giving cow s milk in cases of acute indigestion The paper for the most part dwelt on the chronic forms of this condition In one instance he has seen rectal irrigation kept up for many months doubtless doing harm The only symptom had been some mucus in the stools He again wished to make the point that no fixed rule can be formulated so as to meet the indications in all cases

Therapeutics

Chorea Treated by Sodium Cacodylate

Lannois has used sodium cacodylate in treatment of chorea, because of its innocuity, in relatively large doses He gave it hypodermically in doses of 02 to 04 per day He continued it for five days and began again after an interval of five days Three weeks' treatment usually sufficed when other treatment failed He records several cases in which good results were obtained by its use

Sodium cacodylate is a white amorphous powder, soluble in water, frequently given subcutaneously, and is a good substitute for other arsenic preparations It contains 48 per cent of arsenic and is comparatively free from poisonous properties It may be given by the mouth, well diluted, in one half grain doses, gradually increased By the French physicians it is very frequently given per rectum It has been employed with decided improvement in all the diseases in the treatment of which arsenic preparations are indicated

Treatment of Eczema

Abraham, in *The Clinical Journal*, thinks that the treatment should consist in quieting the inflammatory condition, in removing the hyperemia and lessening the exudate, and at the same time to asepticise and protect the parts

FOR THE EXUDATION

℞	Zinci oxidi	ʒi	4
	Acidi boracici	℥ss	16
	Pulv amyli	℥ss	16

M Sig Use as a dusting powder

TO REMOVE THE HYPEREMIA

℞	Zinci oxidi	gr xx	1	33
	Hydrarg subchloridi	gr x		66
	Plumbi acetatis	gr x		66
	Ung hydrarg nitratis	gr xx	1	33
	Vaselini q s ad	℥i	32	

M Sig Apply locally, after first bathing the parts with a weak tar lotion

Internal treatment should be combined with the local treatment Alkalies, tonic bitters and aperients for the digestive tract Full medicated baths containing starch, bran and a small amount of tar He has found, in some cases, the modified Lassar's paste to be beneficial, prescribed as follows

℞	Pulv amyli			
	Zinci oxidi, āā	ʒii	8	
	Acidi salicylici	gr x		66
	Vaselini	℥ss	16	

M Sig To be thickly applied after the bath

Treatment of Diabetes with Sodium Salicylate

R T Williamson, of London, in *British Medical Journal*, in an article on treatment of glycosuria and diabetes mellitus, concludes that in certain mild cases of diabetes or in persistent glycosuria, it has a decided action in markedly diminishing the sugar excretion He states that it is not suitable in all cases of diabetes, however Its administration should be watched closely, and it should be administered in fairly large doses It is best to commence with 10 grains three times a day, then four times a day, and increase gradually up to 15 grains four or five times a day, watching for toxic symptoms In severe forms of diabetes patients frequently gain in weight while taking the drug It is better borne if well diluted

Potatoes in Diabetes Mellitus

A Mosse, as noted in the *Indian Med Rec*, states that potatoes should have a place in the dietary of diabetics He cites two cases in which the wisdom of such addition to the fare was evidenced by a prompt decrease in the amount of sugar excreted in the urine The potatoes should be given to the amount of from two to three pounds daily, as a substitute for the whole or a part of the bread allowed The cases which seem to respond best to such management are those of medium intensity and of the arthritic type

Treatment of Influenza

L Bourget, in *Ther Monat*, states that the treatment of

influenza and rheumatism should be carried out along similar lines inasmuch as the etiological factors are similar, and consequently he employs the following as a liniment

℞ Acidi salicylici	ʒi	4	
Methyl salicylatis	ʒiiss	10	
Olei eucalypti	ʒiss	6	
Olei salviæ	m l	3	25
Olei myristicæ	ʒi	4	
Olei camphoræ	℥i	32	
Spts juniperis	℥iv	128	

M Sig Put the patient to bed and rub this liniment into both the anterior and posterior portions of the chest two or three times a day

Precautions in the Examination of Pregnant Women

The *Vermont Med Monthly* gives the following general precautions to be observed by the obstetrician 1 The hands of the obstetrician are his most valuable agents 2 That any infection is almost invariably transmitted by the examining finger and less often by unclean instruments 3 Pregnant and parturient women can be very speedily infected by a single examination 4 Internal examination should be as infrequent as possible during pregnancy and labor, resorting to it only when external examination does not afford sufficient information

Subcutaneous Injections of Gelatin for Hematuria

Gossner, of Konigsberg, as noted in the *British Medical Journal*, records the cure of a case of hematuria by first administering tannin, lead acetate, ergotin, etc, but without any effect on the bleeding Gelatin was then tried as a subcutaneous injection into the tissues of the thorax, the preparation being carefully sterilized and warmed and 200 cubic centimeters being injected Severe pain, headache, vertigo and general restlessness followed, which, however, soon subsided and the next day the hematuria still showed absence of blood Therefore the cure was regarded complete

Treatment of Beri Beri

B M Gibson, of Edinburgh, in the *Jour of Tropical Medicine*, gives the following treatment of beri beri, and as this is of more than passing interest to the medical fraternity of the United States we give his outline of treatment, which is as follows The first step is to remove the patient from the place where he contracted the disease His diet should then be changed to beans and fat pork in order to supply nitrogen and fat The following prescriptions are recommended

℞ Tinct digitalis	ʒii	8	
Tinct ferri perchloridi	ʒii	8	
Acid phos dil	ʒiii	12	
Infusi calumbæ q s ad	℥vi	192	

M Sig One tablespoonful three times a day

Or

℞ Liq arsenicalis			
Liq strychninæ, āā	m xxvi	1	70
Liq ferri perchloridi	ʒiss	6	
Glycerini	℥i	32	
Infusi calumbæ q s ad	℥vi	192	

M Sig One tablespoonful three times a day

Or

℞ Quininæ sulph	ʒi	4	
Ferri sulph	gr xxxvi	2	36
Mag sulph	ʒiv	16	
Acidi sulph dil	ʒi	4	
Spts chloroformi	ʒii	8	
Aq menth pip, q s ad	℥vi	192	

M Sig One tablespoonful three times a day

He states that in dropsical cases, one tablespoonful of brandy given every two hours is very effective

Treatment of Typhoid Fever by Enemata of Olive Oil

O F Paget, in *The Lancet*, states that splendid results are derived in treatment of typhoid fever by slowly administering every twelve to fifteen hours, an enema of about one pint of olive oil, this should be retained in the bowels for several hours, if possible If after twelve hours it is not expelled it may be discharged by giving an ordinary soap and water enema, three hours after which another enema of olive oil may be given The daily administration is discontinued after one week, and then may be given only when the temperature is elevated or the bowels constipated If diarrhea is present olive oil should always be given and the use of bismuth is not necessary He claims that the death rate under this treatment is *nil* Heart failure, sequellæ, tympanites or perforation of the bowels is not present, nor are cold baths necessary

Sexual Irritability of the Male

A Sander, in *Med News*, states that sexual irritability in the male may be classified as belonging to the lithemic type the nervous type and the third class comprises those in which gonorrhea has been an efficient cause For the first and second classes he recommends moderate exercise in the open air The diet of the lithemic should be properly regulated, avoiding too much tea, coffee, and alcohol Fish and poultry are good To aid elimination he recommends

℞ Sodii et potass tartratis	℥ii	64	
Acidi pot tartratis	℥i	32	

M Sig One teaspoonful in water upon rising

To allay the sexual passion of the neurasthenic, one dram doses of fluid extract of salix nigra at bed time are usually effective For the nervous system

℞ Liq potassii arsenitis	ʒi	4	
Ext ergotæ fluidi	ʒiii	12	
Tinct capsici	m x		66
Glycerini	℥i	32	
Aquæ q s ad	℥viii	256	

M Sig One tablespoonful three times a day

Acne Rosacea

℞ Sulphuris precip	ʒi	4
Zinci oxidi	ʒiss	6
Calminii	℥ii	8
Glycerini	ʒiss	6
Aq rosæ q s ad	℥iv	128

M Fiat lotio Sig Apply locally night and morning

Medicolegal

Two Thousand Dollars the Value of a Boy's Life—The Supreme Court of New Jersey declares, in the case of Rowe vs the New York & New Jersey Telephone Company, brought to recover damages for the death of a boy about 12 years old, caused by negligence that it is unable to see how, on any rational computation of probabilities, the pecuniary loss resulting to his next of kin from his death could equal $5,000, as assessed by the jury, and makes a reduction of the damages to $2,000 the condition of not requiring a new trial

Permissible Basis and Form of Expert Evidence—The Supreme Court of Alabama says, in the case of the Louisville & Nashville Railroad Company vs Stewart, that opinion evidence of experts, such as physicians, may be based on facts of which the witness has actual knowledge, as well as on an abstract hypothesis And it holds that it is not a valid objection to a physician's opinion concerning cause and effect of disease and injury that it assumes the form of a conclusion

When Disease is Indirectly Cause of Death from Injury—The Supreme Court of Vermont says that the circumstantial evidence bearing on the cause of the insured's death, in the case of Clark vs Employers' Liability Assurance Company, presented the question whether he was stricken with spontaneous apoplexy and fell in a place where the wheels of his wagon passed over his neck, or whether he accidentally fell where the wheels passed over him and suffered apoplexy as a result of the injuries received The insurance policy did not insure against death occasioned wholly or partly, directly or indirectly, by disease or bodily infirmity And the court holds that, inasmuch as the policy did not insure against an accidental death caused indirectly by disease, if the insured's fall was caused by disease, that disease was the cause of his death, within the meaning of the exception His helpless plight in the tracks of the approaching wheel was due to the apoplectic stroke, and to that alone An accidental death by crushing, it goes on to say, is caused indirectly by disease, if the person

falls in the place of danger because of disease The death is caused directly and wholly by the crushing, but it is nevertheless caused indirectly by the disease Wherefore, it holds that it was necessary for the beneficiary suing on the policy to show, not only that the injury received was the direct cause of death, but that disease did not indirectly cause the death by subjecting the insured to that injury

Physical Examination in Action to Annul Marriage — A motion was made before Mr Justice Leventritt at a special term of the Supreme Court of New York, New York County, to compel the defendant to submit to a physical examination before trial, in an action brought for the annulment of a marriage on the ground of fraud, in a case the title of which is 'Anonymous ' The alleged fraud consisted in representations of good health relied on by the plaintiff, when the defendant was, in fact, at the time of his marriage, afflicted with the disease known as "syphilis ' The right exercised from the earliest days by courts having jurisdiction in divorce matters, in ordering inspection, the judge says, is not statutory And he calls attention to the fact that in all the cases cited here, in which an examination was ordered, relief was sought on the ground of impotence, and he says that he was referred to no authority in which an examination had been directed to establish the existence of specific disease But he declares that he can discover no difference in principle where the essential elements authorizing inspection in the one case exist in the other A marriage in his opinion, should be annulled as much on the ground here assigned for relief as in the case where consummation is rendered impossible by reason of the physical defect or malformation of one of the contracting parties The state which may not improperly be considered a third party, as it were, to every marriage contract, has in a proper case as much interest in dissolving the marriage tie as in upholding it Where a person to his knowledge afflicted with a most grievous venereal disease, contagious in a very high degree, and which, even under the most favorable circumstances, requires years before it yields to treatment, and may even then for a long time still lurk in the system, a source of hidden danger marries an innocent girl, under representations that his health is sound, threatens her with infection, and their offspring with hereditary disease, a case, the judge holds, is presented for state interference and judicial annulment So, while he says that it is quite true that fraudulent representations as to good health, as that term is generally understood do not vitiate the marriage compact, he sees in this case, if the allegations be true, an instance of extreme fraud, and a misrepresentation as to health not such a one as is contemplated by the authorities And he is satisfied that the power exists, within narrowly circumscribed limits, in an action of this nature to compel an inspection of the person of the defendant, that it is inherent in the court in this class of actions, but that the remedy is so extraordinary, and necessarily so violative of the privacy of person, that its application should be restricted to extreme cases, and then not exercised before it is apparent that no other means of proof are available An examination of this nature, he further says, can and should never be granted as a matter of course The absolute necessity therefor must unmistakably appear A proper regard for the rights of the individual requires an adherence to the rule that the necessity for the examination should appear on the trial and not upon facts shown on a preliminary hearing

Society Can Not Enjoin Payment for Vaccination —The Supreme Court of Alabama says that the case of the Commissioners' Court of Perry County vs the Medical Society of Perry County was brought by the medical society, a corporation organized under the charter of the Medical Association of the State of Alabama, and three practicing physicians of said county who were members of said society and constituted the board of health of the county who sued as individuals The theory proceeded on was that the medical society of the county had the exclusive right and power to appoint or employ persons to vaccinate the people and fumigate the houses, etc, in prevention of the spread and stamping out the contagion of smallpox which had broken out in one section of the county, and that the commissioners court had no such power or authority and it was averred that, notwithstanding such want of power in said court that body had employed a certain party to perform that service at a salary or wage of $100 a month, and that said party was proceeding to perform his part of the contract The prayer was that said party be enjoined from performing said contract, that the judge of probate, the commissioners' court, and the treasurer of the county be each enjoined from allowing or paying the said party's claim for such illegal services, and that he be enjoined from collecting the same But, as it was averred in the answers and proved on the hearing that the party had completed the performance of his contract on the day the bill was filed, the court says that no case was made for an injunction perpetually restraining him from further services under the contract Moreover, the court holds that the medical society and individuals suing with it had no standing or right in a court of equity to restrain the commissioners' court, the probate judge, and the treasurer of the county, or any of them, from paying out moneys belonging to the county under any circumstances whatever It says that it is too plain for argument that the medical society of the county, even assuming it to be a corporation with capacity to sue, and to be vested with the statutory powers and duties in respect to public health—questions none of which the court decides here—has as such no interest whatever in the disposition the constituted county authorities may make of county funds, and can not be damaged, or in any wise prejudiced, by any appropriation of such funds, authorized or not, which the commissioners' court may determine on Whatever may be the powers in other respects of the medical society of a county under the statute, it is clear beyond cavil that it has no power in its corporate capacity, if it is a corporation, to sue for the correction or prevention of public abuses committed or threatened by county officers in the disbursement of county funds Again, the court says that the conclusions of the medical society that it had been "crippled and injured in the performance of its duties under the laws of this state," by the action of the commissioners' court in making this contract would be entirely insufficient as pleading to show any crippling or injury The facts must be stated Wherefore, the court holds that the society was without interest in the case made at the hearing, and should not have been awarded relief Besides, it holds that the individual complainants, considered apart from the medical society, had no title to the relief sought, it not being alleged that they were citizens and taxpayers of the county, nor that they were property owners and taxpayers therein

Current Medical Literature

Titles marked with an asterisk (*) are noted below

New York Medical Journal, May 4

1 *Abdominal Pain in Typhoid Fever Thomas McCrae
2 *Spinal Anesthesia by Cataphoresis J Leonard Corning
3 The Pathology and Bacteriology of Uretero intestinal Anastomosis (To be concluded) F Robert Zeit
4 *The Use of the Suprarenal Capsule in Diseases of the Heart (To be concluded) Samuel Floersheim
5 *The Law and the Inebriate With Remarks on the Treatment of Inebriety Joseph Collins

Medical Record (N Y), May 4

6 *The Operation for Radical Cure of Inguinal Hernia at the End of the Century as I Saw it Performed by Bassini Lucas Championnière De Garmo Coley and Broca Campbell Ford
7 *Varicella in Adults Alvah H Doty
8 A Plea for the Conservation of Breast Milk in whole or in part Thomas S Southworth
9 *On Bandages for Nephroptosis George M Edebohls
10 *Version Indication Technique Limitation S Marx
11 *Axis Traction Forceps Egbert H Grandin
12 *Cesarean Section Edwin B Cragin

Medical News (N Y), May 4

13 Medical Department of the University of Pennsylvania Charles W Dulles
14 *A Report of Twenty four Operations Performed during Spinal Analgesia William S Bainbridge
15 *Some Sources of Error in Laboratory Clinical Diagnosis Theodore C Janeway

Boston Medical and Surgical Journal, May 2

16 *Contusions of the Abdomen Charles L Scudder
17 *Observations on the Use of Antistreptococcus Serum in the Treatment of Puerperal Sepsis with a Report of Five Cases Frank A Higgins
18 A Case of Cesarean Section in a Face Presentation, Complicated by Uterine Fibroid Emma S Call
19 Notes from the Neurological Department of the Massachusetts General Hospital Exophthalmic Goiter and Fright E W Taylor

Philadelphia Medical Journal, May 4

20 *Puerperal Polyneuritis and Poliomyelitis James Stewart
21 *Localization of Sound and its Bearing on Hearing—Especially in Unilateral Deafness B Alex Randall
22 *German Clinics of To day John C Hemmeter
23 Volvulus and Intussusception of Meckel s Diverticulum Joseph McFarland
24 *Deaths from Anesthetics D H Galloway
25 *Esophoria or Latent Squint Francis Valk
26 *Strangulated Hernia Walter Lathrop
27 Ammonium Persulphate Solution A New Decolorizing Fluid for Staining Spores and Sputum Robt L Pitfield

American Medicine (Philadelphia), May 4

28 *An Analysis of my Vaginal Ablations in 181 Cases of Pelvic Inflammation and Uterine Fibroid Degeneration (Concluded) W R Pryor
29 *Inguinal Hernia B Merrill Ricketts
30 Vaginal False Membrane due to Bacterium Coli J N Hall
31 *A New Series of Anaerobic Bacteria Louis LeRoy
32 *Conclusions from Personal Observations of Compound Fractures Douglas C Moriarta
33 The Food Value of Alcohol and Professor Atwater s Experiments and Teachings (To be concluded) John Madden
34 *Some Remarks on the Cumulative Action of Digitalis with an Illustrative Case Edwin Zugsmith
35 *Prolonged Intubation Edwin Rosenthal

Cincinnati Lancet-Clinic, May 4

36 *Carbuncle Robert Carothers
37 Enormous Gall stones with Ovarian Cyst and Uterine Fibroid J F Baldwin

St Louis Medical Review, May 4

38 *Complicated Ovarian Tumors Emil Ries
39 Case of Vaginal Hernia Complicated with Pregnancy and Sepsis Frank A Glasgow
40 Librarian s Report to the St Louis Medical Library Association for the Year Ending April 24 1901 Frank J Lutz

Medical Fortnightly (St Louis), April 25

41 Heredity, Criminality, and Degeneracy H Hatch
42 Chronic Gastritis Frank Parsons Norbury

Pediatrics (N Y), April 15

43 *Two Starvations J C O'Day
44 *Inheritance of a Gouty or Uric Acid Toxemia in Children, with Statistics of Fifty seven Cases Carl N Brandt
45 Some Pulmonary Affections of Children Following the Infectious Diseases Albert M Cole

Chicago Medical Record, April

46 The Clinical Type of Neurasthenia Harold N Moyer
47 Etiology of Neurasthenia Sanger Brown
48 On the Pathology of Neurasthenia L Harrison Mettler
49 Treatment of Neurasthenia Archibald Church
50 *State Aid in the Prevention of Tuberculosis C O Probst
51 The Management of Fevers I N Love
52 *Miscarriage of Municipal Sanitation Ernest Wende
53 *Demands of Sanitary Science H M Bracken
54 Effect of Physical Conditions and Sera on the Typhoid Bacillus Adolph Gehrmann
55 Surgical Cases (Inoculation, Tuberculosis from Hides, etc) Daniel N Eisendrath
56 A Case of Raynaud s Disease Charles Louis Mix
57 *The Family Physician's Treatment and Prevention of Purulent Otitis H Gradle
58 A Case of Gangrene of the Appendix Simulating Infection Following Labor Denslow Lewis
59 Vesicosigmoidal Anastomosis E J Senn
60 Genito Urinary Surgical Notes F Kreissl
61 Specimen Obtained from a Bottini Operation E W Andrews

Alienist and Neurologist (St Louis), April

62 Friedrich Nietzche A Study in Mental Pathology William W Ireland
63 *The Successful Management of Neuralgia C H Hughes
64 Degeneracy Stigmata as a Basis of Morbid Suspicion A Study of Byron and Sir Walter Scott James G Kiernan
65 Medicine in 1800 Samuel L Mitchell
66 Morphinism and Crime T D Crothers
67 The Legal Disabilities of Natural Children Justified Biologically and Historically (To be continued) E C Spitzka

Clinical Review (Chicago), May

68 On the Use of General Anesthetics Franklin C Wells
69 Clinical Lectures upon the Etiology, Pathology, Diagnosis and Treatment of Tumors A H Levings

Journal of Cutaneous and Genito-Urinary Diseases (N Y), April

70 *Benign Epithelial Tumors of the Skin B H Buxton
71 Case of Dermatitis Herpetiformis Illustrating an Unusual Pustular Variety of the Disease Glover William Wende and Herbert D Pease
72 *Impetigo Contagiosa Bullosa and its Bacteriology Martin F Engman
73 Report of Two Cases of Impetigo Contagiosa Bullosa One of them Fatal Joseph Grindon

Bulletin of the American Academy of Medicine (Easton, Pa) April

74 The Kentucky Medical Law J N McCormack
75 Associate Medical Examining Boards Charles A Groves
76 A Brief Review of the Medical Curriculum of the United States, with Special Reference to the Defects, and Indicated Modifications as Demonstrated by the State Medical Examination for Pennsylvania Henry Beates, Jr
77 The Co operation of the Medical Profession of the United States with the National Confederation of the State Medical Examining and Licensing Boards, in Establishing Interstate Reciprocity for the License to Practice Medicine Emil Amberg
78 What Steps Shall be Taken to Establish a Uniform Standard of Preliminary Requirements in Accordance with the Recommendations Contained in the Report of the Committee on Minimum Standards, Adopted June 5, 1899 N R Coleman

Illinois Medical Journal (Springfield), April

79 *Paralysis of the Sphincters of the Anus Caused by the Forcible Dilatation of That Orifice Edmund Andrews
80 Rectal Fistula A E Halstead
81 *The Diagnosis of Rectal Diseases I Rawson Pennington
82 *The Treatment of Hemorrhoids N H Henderson
83 *Acute Hemorrhagic Encephalitis Charles D Center
84 *What Shall the Harvest Be? (Public Hygiene and Morals) R H Henry
85 The Medicolegal Status of Abortion O B Will
86 The Treatment of Tuberculosis and Other Abscessses and Local Infections by Pure Carbolic Acid with Report of Cases I R and G W Walker
87 Practical Observations on the Chemical Effect of a Few of the Older and Some of the Newer Remedies E L Herriott

Journal of Medicine and Science (Portland, Me), April

88 The Availability of the Nutrients and Potential Energy of Food Materials Charles D Woods
89 The Process of Digestion Chas O Caswell
90 A Reply to Dr D A Robinson's Article Morris Longstreth

International Medical Magazine (N Y), April

91 Treatment of the Different Varieties of Chronic Endometritis Augustin H Goelet
92 Impetigo Contagiosa Jay F Schamberg
93 Some General Remarks on Electricity in Gynecology G Betton Massey
94 Rhinoliths, with Report of Two Cases of Diagnostic Interest Carle Lee Felt
95 Laceration of the Perineum and its Primary Repair E E Montgomery
96 The After Treatment of External Perineal Urethrotomy J D Thomas
97 The Method of Removing and Preparing Portions of Tissue from the Uterus for Diagnostic Purposes W Wayne Babcock

American Gynecological and Obstetrical Journal (N Y), April

98 *The Treatment of Displacement of the Uterus, with Adhesions F H Davenport
99 *Causes of Dysmenorrhea Albert M Judd
100 The Causes and the Significance of the Obstetric Hemorrhages J Clifton Edgar
101 *Osteofibromyoma of the Uterus George Ben Johnston
102 *A Case of Natural Uretero intestinal Anastomosis C A Kirkley
103 *The Treatment of Cancer of the Uterus J Wesley Bovée

St Paul Medical Journal, May

104 Psychotherapeutics J W Frizell
105 Psychology of the Medical Profession Wm B Lyman
106 The Medical Profession D W Day
107 Rickets John Specht
108 Feeding of Infants Caroline Hedger
109 The Modern Treatment of Tabes Dorsalis, with Report of a Case Chas R Ball
110 Glaucoma Thomas McDavitt
111 Adrenalin, the Active Principle of Suprarenal Extract the Most Powerful Hemostatic Known Frank C Todd
112 Excision of the Rectum for Cancer James W Robertson
113 Vesico vaginal Fistula Repaired Under Hypnosis A Shimonek

University of Pennsylvania Medical Bulletin (Philadelphia), April

114 A Series of Twelve Articles on Medical Men Prominent in the Civil and Military Affairs of Revolutionary Times Francis R Packard

115 *Notes on Fifty Operations for Otitic Extradural Abscess B Alex Randall
116 Primary Sarcoma of the Spine James K Young
117 A Critique of Certain Methods of Gastric Analysis David L Edsall
118 Adrenalin the Active Principle of Adrenal Extract a Proposed Agent in Morphin and Opium Poisoning in Circulatory Failure in the Prevention of Collapse in Anesthesia, and in Allied Conditions—A Preliminary Note Edward F Reichert

International Journal of Surgery (N Y), May

119 Practical Suggestions on the Treatment of Appendicitis Henry Flood
120 Regional Minor Surgery (Continued) George G Van Schaick
121 The Ligament Operation W H Maxson
122 Practical Suggestions on the Treatment of Rectal Diseases (Continued) James P Tuttle
123 Nose and Throat Work for the General Practitioner (Continued) George L Richards
124 Two Interesting Cases of Appendicitis A R Small
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126 Tuberculosis Literature for the General Practitioner and His Work in the Combat Against the Great White Plague S A Knopf
127 *Rectal Reflexes Wellington Burke
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129 Operations for Cleft Palate and Hair Lip Dudley P Allen
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Vermont Medical Journal (Burlington), April

132 A Few Rambling Thoughts on Medical Matters C D Albro
133 A Case of Chronic Rheumatism L B Smith
134 A Non surgical Treatment of Hemorrhoids with Clinical Reports Eugene C Underwood

Therapeutic Gazette (Detroit), April 15

135 Puerperal Mastitis Its Prevention and Treatment Edward P Davis
136 Gastrostomy for the Relief of Painful Deglutition Incident to Tuberculous Laryngitis Edward Martin
137 *The Blood Pressure Raising Principle of the Suprarenal Glands —A Preliminary Report Jokichi Takamine
138 *Physiological Relations of Scopolia Carniolica to Atropa Belladonna Horatio C Wood Jr
139 Gastric Ulcer Its Etiology Symptomatology and Diagnosis with Special Reference to Treatment (Continued) D D Stewart
140 Management of Arrested Posterior Positions of the Vertex Richard C Norris
141 Hydrocele and its Treatment Summary of 338 Operations Description of a New Method Suggested by Doven for the Radical Cure of Hydrocele of the Tunica Vaginalis Testis Orville Horwitz

Georgia Journal of Medicine and Surgery (Savannah) April

142 *Relation of the Profession to the General Public R R Kime
143 An Important Class of Skin Diseases and their Treatment Eugene C Underwood
144 Coughs Their Suppression and Cure Louis DeLorne

Texas Medical News (Austin), March

145 Subarachnoid Cocainization of Medullary Anesthesia with Report of Cases J G Boyd
146 Scarlet Fever W T Shearer

AMERICAN

1 **Abdominal Pain in Typhoid.**—From an analysis of 500 cases classified as regards pain the following conclusions are deduced by McCrae 1 About two fifths of the patients are free from pain or tenderness rather less than one fifth have tenderness only and pain is present at some time in about two fifths of the cases but during the course only in about one third 2 Pain due to some condition other than the specific bowel lesions was present in about 14 per cent of all cases and in about two fifths of the patients having pain during the course 3 Pain occurred with hemorrhage or perforation in about 5 per cent of all cases and in about 15 per cent of the cases in which there was pain during the course 4 Pain was most constantly present with perforation when it was usually sudden in onset severe in character and paroxysmal in occurrence The pain of perforation was most closely simulated by that occurring in some cases of hemorrhage that from phlebitis and that of unknown origin 5 In about two fifths of all cases with pain during the course no cause could be found Should this occur with other abdominal symptoms the condition may much resemble perforation

2 **Cataphoretic Spinal Anesthesia**—Corning reports experiments to produce spinal anesthesia by cataphoresis and details methods He performed it on a man in whom it was thought unadvisable to give general anesthesia, by making an incision and injecting through an insulated tube, which passed down through the ligamentum subflavum, fifteen minims of a 2 per cent solution of hydrochlorid of cocain, which was deposited between the dura and vertebral canal Then the electric current was passed from the tube to a sponge on the abdomen with a current of 3 milliampere Anesthesia appeared slowly, fully one half hour being required and the ether was begun to be administered when it was found that the patient was anesthetic and the ether administration was discontinued and the operation carried on under the cocain anesthesia with success The operation was an osteotomy of the foot and the anesthesia of the legs persisted for an hour afterwards While the operation was physiologically a success, Corning concludes it was a failure practically, on account of the time necessary to induce the anesthesia and the formidable paraphernalia required He reports the case however, trusting that others may improve upon it or be saved from going over the same ground

4 **Suprarenal Capsule**—Floersheim's second paper describes the preparation of suprarenal capsule for internal use, the method of administration, giving the drug by the mouth in gelatin capsules, also the rapidity of its action and the indications He thinks suprarenal extract is safer and better in heart disorders than digitalis, strychnin, strophanthus, or nitroglycerin and is the most powerful heart stimulant known The remainder of his article is taken up with histories of cases

5 **Inebriety**—The history of the treatment of inebriety and the legislation of different countries is given by Collins The paper is simply a brief survey of the laws in relation to the inebriate, abroad and at home

6 **Hernia**—After describing the different operators' methods mentioned in his title Ford describes the stitches which he has invented The single knot stitch, the square knot stitch and the friction knot stitch and calls attention to the fact that neither of these is the buttonhole stitch commonly called Billroth's The reader is referred to the article for details of these stitches

7 **Varicella**—Doty enumerates the signs characteristic of varicella that distinguish it from smallpox and also calls attention to the fact that the former may occur in adults, contrary to common opinion The signs to which he refers are 1 Character of eruptions The "shotty" feeling and involvement of the true skin as compared to the superficial nature of the eruption in varicella 2 The manner in which it appears, smallpox has but a single crop, while chickenpox has successive ones 3 The distribution or location of the eruption In smallpox the hands and feet are almost always involved to some extent, while in chickenpox they are either not affected at all or have a very little eruption The appearance of hard, cicatricial and distended papules on the hands and feet especially palms and soles, is a very important sign of smallpox The back gives one of the best localities to study varicella and while umbilication is characteristic of smallpox, what will pass for this may be sometimes found in chickenpox and some forms of syphilitic eruptions Constitutional symptoms of course, are not to be neglected but the character of the eruption should be studied first

9 **Nephroptosis**—The subject of bandages to be employed for nephroptosis is discussed by Edebohls, who summarizes his paper as follows Bandages for movable kidney may be divided into two general classes 1 Simple bandages and apparatus embodying the feature of a special kidney pad 2 Simple bandages act by supporting the entire contents of the abdomen sustaining and more or less immobilizing the movable kidney or kidneys on top of the intestinal mass 3 All the relief to be gotten from bandages in cases of movable kidney is

obtainable from one of two devices, either from an elastic bandage, encircling and sustaining well the lower two thirds of the abdomen, or from a long and low reaching corset, fitted and adjusted with the same end in view 4 The relief obtainable from bandages in any case of movable kidney will depend upon the presence and the degree of any associated enteroptosis The greater the degree of associated general enteroptosis the better the prospects of relief from a bandage or corset When movable kidney exists without general enteroptosis, no form of apparatus will prove satisfactory 5 All forms of apparatus with special kidney pads or trusses are to be absolutely rejected because they are impotent to fix and sustain a movable kidney, and because any pressure they may exercise is injurious to either the kidney or to neighboring organs especially the vermiform appendix, or to both 6 In all cases in which relief of symptoms can not be obtained from either a proper simple bandage or corset, nephropexy is indicated

10 **Version**—The indications of version are elaborated by Mary, who classified them as follows 1 Malposition and malpresentation 2 Contracted pelvis, either relatively or absolutely so 3 Prolapsus funis or allied condition 4 For all other unclassified conditions, such as placenta previa 5 Except under very rare conditions in all cases in which the head remains above the brim, the exception being where there is a uterine rupture or Bandl contraction This is the only indication for forceps as compared to version when the head is above the brim In the most of these prolonged labors, however, when the child has been already sacrificed or is in immediate danger elective perforation should be given the preference When the child is *in extremis* he thinks most of saving the life of the mother and version is needed in all cases where the life of the mother is threatened, as, for example, by a uremic convulsion or an embolus of the lung, supposing of course, a dilatable os or one that is dilated When such is not present, we must anticipate it with a rapid manual dilatation or deep Duhrssen's incision The following operative rules are laid down, which have been of great value to him 1 Always be sure of the position and the presentation 2 Be sure that the fetus is alive or not in immediate danger 3 Do version as early as possible in the presence of an intact fruit sac, or at least as soon after the rupture of the membrane as possible 4 Always introduce the hand according to the position of the fetal feet. 5 Always turn the child in such a fashion as to keep Nature's classic ovoid intact, that is, carry the foot along the abdominal plane of the pelvis and not away from it The technic and details are given The limitations of the operation are also noted We must estimate the operation from the standard of the average pelvis and average size of the child and no operation short of perforation should be instituted in the presence of a dead or dying fetus Our lowest limit for elective version would be in the case of a pelvis whose true conjugate is at or above 3 25 inches in the presence of an average sized or small child These measurements would not hold good in the presence of a large or over sized child The use of the Walcher position when the head is passing the contracted inlet is mentioned as of advantage, as increasing the true conjugate between one half and three fourths of an inch Individual skill and experience are of importance, but he believes that the operation stands midway between forceps and Cesarean section and the field for symphyseotomy is growing smaller and smaller

11 **Axis Traction Forceps**—The advantages of the axis traction forceps are dwelt upon by Grandin He thinks that one need only be trained in their use to have fewer impossible deliveries and far less danger to the maternal parts and intracranial injuries laid to their use

12 **Cesarean Section**—Nine cases are reported by Cragin as illustrating the advantages of Cesarean section, which he thinks has the preference over symphyseotomy in that every step of the operation is under the control of the surgeon, the mortality is less and convalescence more rapid and easier Some points of the technique are mentioned and the writer expresses his personal preference to leaving the uterus as nearly intact as possible whenever it can be done Only when infection or disease of the uterus and appendages exist or pelvic deformity is extreme does he prefer to follow the Cesarean section by hysterectomy

14 **Spinal Analgesia**—A summary from 50 cases, including 24 here reported by Bainbridge, is in substance as follows 1 Cocain is more satisfactory than eucain The anesthesia is more uniform and the unpleasant after effects no greater 2 Analgesia to the level of the diaphragm can be depended upon in all cases where moderate doses of a potent solution of cocain has been introduced by lumbar puncture Sometimes the analgesia may be sufficient for operation on the upper extremities 3 Complete analgesia including the eyes, mouth and throat has been seen 4 The preparation as for general anesthesia diminishes all the unpleasant effects of cocain and eucain and often prevents them 5 Moderate doses of bromids before injection frequently do away with the initial vomiting and the liability of headache is lessened 6 In neurotic patients there are often hysterical symptoms following completion of the injection but a calm follows as a rule, in a few minutes 7 The initial nausea and vomiting often occur soon after puncture, but last only for a minute or two and usually do not recur Consciousness being preserved the danger of vomited matter getting into the lungs is practically nil 8 The analgesia lasts from thirty minutes to four hours 9 Depression after puncture is inconsiderable The use of ethyl chlorid (Bengue) largely prevents pain when the needle is introduced 10 The preparation of the patient the use of nitroglycerin by hypodermic injection or employment of the coal tar products with caffein, control the headache frequently seen after spinal puncture 11 In a few cases there may be temporary motor paralysis or vertigo 12 Spinal puncture has not affected normal or diseased kidneys 13 Usually the tactile, muscular hot and cold sensations are retained The cautery at a dull red heat causes no pain, but hot water produces discomfort 14 Usually the patient sleeps the first night 15 There is often a temperature of a few degrees within eight or ten hours of the operation Whether of psychic origin or not is unanswered The circulation and respiration are not seriously affected

15 **Errors in Laboratory Diagnosis**—Janeway calls attention to a number of errors which occur in laboratory clinical diagnosis In urinary examination the most conspicuous error is failure to filter the urine, which makes a delicate test impossible The most reliable tests are Heller's, the acetic acid, and ferrocyanide, heat and acid tests As a general test Heller's is undoubtedly the most useful No conclusion, however, can be drawn from the presence of albumin in the urine, excepting that it is not normal The greatest significance of the negative test is in cardiac cases in which it gives evidence of absence of congestion of the kidney and makes the prognosis more hopeful In the sugar test there are many serious errors, especially with Fehling's solution It is most useful for just one purpose, viz, to exclude the presence of sugar The tests which give positive indications of the presence of sugar are the polariscope fermentation and the phenylhydrazin reaction The second one of these has some advantages in being useful also for quantitative determination The phenylhydrazin test as ordinarily given is the most unsatisfactory, but the use of pure phenylhydrazin 5 drops, glacial acetic acid, 10 drops, and saturated solution of sodium chlorid, 1 c c to 10 c c of urine boiling vigorously and letting cool slowly in the air has given him most excellent results Sugar in the urine does not necessarily signify diabetes The difficulties of clearing a mixed twenty four hours' urine is considerable and without this a fairly representative sample is hardly to be obtained An excellent method where it can not be had is to take equal parts of the water passed in the late afternoon before retiring and upon rising in the morning, but this will not suffice for careful quantitative methods One of the commonest errors in connection with specific gravity is to conclude that the urine does not contain sugar, if it is below some arbitrary point, 1030 or 1020 He has often seen it with a specific gravity of 1015 Another mistake is failure to recognize the significance of the urine of constant low gravity and increased quantity If albumin is absent such urine points strongly to contracted kidney As regards the quantitative de

termination of urea it is so dependent upon diet and other factors that he does not think it well to draw many conclusions from a single examination For practical purposes the total solids, as indicated by the quantity specific gravity ratio, affords as much and less often misleading information No error is greater than to neglect microscopic examination and certain points are not sufficiently brought out in the text books One of these is the occurrence of calcium oxalate in a form closely resembling red blood corpuscles in size and shape Janeway has found casts without albumin where he has taken particular pains in applying the trichloracetic acid test, and such findings illustrate the necessity of making one's observations independent of each other The error of making a diagnosis of diabetes from the existence of sugar or of kidney disease on the presence of a few casts is remarked upon In sputum examination the tubercle bacillus is not the only thing to be looked for The examination of the unstained expectoration may be of value The occurrence of Charcot Leyden crystals and Curschmann's spirals in asthma is mentioned Errors in the examination for tubercle bacilli are noted and he particularly speaks of the failure to insure sputum from the chest In blood examination the individual idiosyncrasies as regards color estimation in the hemoglobinometer is noticed and the numerous errors possible in the search for malarial organisms The new polychrome methylene blue stain just perfected by Dr L B Goldhorn places the staining of malarial parasites within the ability of all and is an easy safeguard from any former errors The time of examination is also important, the best is about eight hours before the chill, the parasites then accumulating in the internal organs The mistakes in the diagnosis of leucocytosis, etc, are mentioned and he thinks that the possibility of the confusion of specimens in a large laboratory is a matter of importance He has known of cases where a laboratory diagnosis of typhoid led to overlooking a large internal abscess for three weeks, the mistake being caused this way In the examination of the stomach contents errors are possible The finding of lactic acid has no meaning if milk has been taken and this often occurs with a patient using a roll for his test breakfast, made with milk Töpfer s method with the use of alizarin is rejected by the writer, and he uses Congo red to estimate the total free asid and acid salts The usual tests for lactic acid, Uffelmann's, Kelling's, etc, are subject to so many errors that a positive reaction should not be considered due to lactic acid unless corroborated by a test made in a solution of an ether extract of the filtrate The most we can obtain by our analysis of the gastric contents is the functional diagnosis Errors of judgment are possible The influence of the nervous system on the stomach is so important that the most searching examination of the psychic and physical conditions of the patient can alone guard against serious errors

16 **Contusions of the Abdomen** —The author here attempts to present the symptomatology of the conditions that are liable to occur in abdominal contusions and discusses them in detail The injuries enumerated are those of the ureter, bladder, liver, kidney, stomach, intestines, spleen, and pancreas, in each case the symptoms, diagnosis and treatment are noticed at length The general considerations are given at the end of the article The injury may be externally slight and severe internally, or vice versa The question to be settled following abdominal contusions is whether operative interference is required An exploratory operation will often be justified, even demanded Shock alone may be without discoverable pathologic lesions and improvement from this condition is a valuable indication that the patient can bear the operation Ordinary shock is recovered from in about three hours of the injury Increasing shock should suggest intra abdominal hemorrhage or visceral rupture The absence of shock does not mean the absence of serious lesions In profound and continued shock active operative interference is absolutely contra indicated Hemorrhage, pain, tenderness, vomiting, distension and rigidity are valuable symptoms, the last two suggesting peritonitis and serious infection The questions to be answered in any case are Is operation necessary? Are there lesions of viscera? Two classes of cases should not be operated upon at first 1, that class in which little or no shock is present, in which there are absolutely no localizing signs, and 2, that class in which profound shock, amounting perhaps to collapse, exists Immediate operation is demanded in persistent moderate shock, with or without localizing signs Immediate operation is demanded in cases of progressing hemorrhage Immediate operation is demanded in cases of peritoneal infection For the details of treatment, etc the reader is referred to the original article

17 **Antistreptococcus Serum** —Five desperate cases of puerperal sepsis treated with antistreptococcus serum reported by Higgins, do not seem to show it to be a valuable therapeutic agent in these conditions Its power is limited to a very narrow line of cases It has a very marked depressing effect on the patient and the directions advising its administration off hand in large and frequent doses should not be followed with very sick patients He thinks it is best endured by the patient and less danger follows a dose of 10 c c repeated not oftener than every twelve hours In 20 c c doses it is a remedy not without danger He believes that the serum has no place in the routine treatment of puerperal sepsis and should be only used in desperate cases after failure of other measures, if no improvement is shown after two or at the most three days of its use and after the total injection of 40 to 60 c c it should be discontinued

20 **Puerperal Polyneuritis** —The case reported appears to have been in the first stages, one of neuritis, after several months passing into a poliomyelitis The rapid ascending progress of the disease was the first indication of the involvement of the spinal cord The cause is not clear though a number of other cases of puerperal poliomyelitis have been reported There was severe vomiting during pregnancy, and the author calls attention to the view of Clifford Allbut that such vomiting is due to toxins and suggests that the same toxins may induce neuritis

21 **Localization of Sound** —Randall calls attention to what he thinks is a neglected point in regard to unilateral deafness, that is the difficulty of locating sound which must be experienced by its victims In ordinary hearing there is a sort of stereoscopic action or triangulation by which sound can be rapidly located, but with only one ear hearing, one side of the brain has to do the work of two He thinks that it is time that the value and importance of "binaural hearing" should be better appreciated

22 **German Clinics of To day** —Hemmeter points out certain tendencies in German clinics, viz, putting the personality of the patient in the foreground of the treatment, not the constitution or disease, and the tendency to make use of a large variety of remedies and many methods The dietetic treatment for instance, has been wonderfully evolved He points out the differences between German and American habits of diet, as indicating the need of a special dietetic journal here The prophylaxis is also an important point with them and all the humanitarian devices, which are greatly worked up in German clinics Much attention is also paid there to hydro therapeutics and aero therapeutics, the use of hot and cold air, gymnastics and massage The German internal clinic of to day is no longer under the ban of pathologic anatomy, but its highest aim is the perfection of treatment, to help and to heal

24 **Deaths from Anesthetics** —Galloway calls attention to the common carelessness in regard to the use of anesthetics and gives instances which have occurred under his observation He says that while many operations are practically devoid of danger no anesthetic is ever administered without jeopardizing the life of the patient Administration of anesthetics by an inexperienced man is most strongly condemned He has, he says, helped to resuscitate 17 patients from an overdose of the anesthetic, but has not had a case of his own for nearly six years until within a few weeks This case was reported as illustrating the dangerous power of chloroform and the suddenness of its action, which sometimes may make unpleasant complications He claims that if unnecessary deaths occur from anesthesia the responsibility extends beyond the anesthetizer

and includes the medical colleges which ignore its importance, and make no effort to teach it properly, if at all, and that confer diplomas which the people accept as the evidence of a training which the student has not received

25 **Esophoria**—Latent congenital squint is discussed by Valk who gives a number of cases showing the benefit of operation by shortening In all the same operation was performed, shortening the muscle by a single tuck at insertion of the tendon into the sclera and leaving the catgut suture to be absorbed

26 **Strangulated Hernia**—The mortality in strangulated hernia, according to Lathrop is due to delay in operation and to unnecessary taxis Taxis is never free from danger and should be discarded, excepting in emergencies Strangulated hernia is invariably fatal unless relieved and early operation will nearly always succeed

28 **Vaginal Operation**—In the continuance of this article Pryor gives the further details of his methods He does not consider the presence of pus a positive indication for the removal of pus tubes In young women in the first attacks he generally contents himself with palliative procedures of evacuation After repeated attacks a radical operation is preferable When the adnexa of both sides are so damaged as to require removal the uterus is not only a useless organ, but a mischievous one He goes farther and protests against the removal of one pyosalpinx and leaving the other, though apparently normal The chances of any functional utility of the other one are too slight to be considered The indications for ablation in genital sclerosis are found in the subjective symptoms rather than the physical signs He is outspoken in his opposition to myomectomy, excepting in rare instances A clean curettage supplemented by the administration of mammary extract is without risk, and causes greater reduction in size than myomectomy If he operates for fibroids he uses the radical operation, but does not operate unless disagreeable symptoms are present The mere presence of fibroid is not an indication In certain cases of pus and fibroids he never operates through the vagina if symptoms of appendicitis are present, or where the uterus is broken down in puerperal sepsis laparotomy is demanded as also is the case in large fibroids, but these form only a small percentage of the cases When the complications of pus cases are distinctly abdominal, the operation must proceed through the abdomen Complications and accidents of the vaginal operation are noted and Pryor claims better results than the average in laparotomy He has never found any shortening of the vagina after vaginal ablation

29 **Inguinal Hernia**—The operations for inguinal hernia are reviewed by Ricketts, with the chances of recurrence, etc He calls attention to three causes of failure in radical operations 1 Deficient origin (attachment) of the internal oblique 2 Pressure on the walls of the abdomen by the truss (where one is worn) 3 The length of time hernia has existed, especially in the aged In making a radical operation he says do not divide the fibers of the tissue Do not cut the blood vessels and nerve repair will be more certain and rapid, for the reason that the vitality of the tissue will be preserved, but the operator should cut out the fat

31 **Anaerobic Bacteria**—Le Roy quotes from a report read by Veillon at the International Medical Congress in Paris last summer on some hitherto overlooked and unknown anaerobic bacteria that "Following an extensive systematic series of researches we have been able to isolate 14 species of strictly anaerobic organisms These anaerobes are the principal agents of a whole series of affections of a gangrenous or putrid nature They have been isolated in otitis, mastoiditis cerebral abscess, pulmonary gangrene, putrid pleurisies, dental caries and suppurations of dental origin, sinuses, phlegmons of the orbit, gangrenous pericystitis appendicitis peritonitis, hepatic abscess, periuterine suppurations, certain puerperal infections, bartholinitis, urinary abscesses, extravasation of urine, vesicorenal and perirenal infections, and gangrenous phlegmons The details of the technic employed in the special study of each of the diseases in which these bacteria have been encountered will be found in a series of works undertaken in the laboratory of Prof Granchet We will here content ourselves with giving a resume of the biologic properties of these microorganisms Exclusively anaerobic they have the property of necrosing living tissues and at the same time to cause them to undergo a process of disintegration analogous to putrefaction, these are the agents of the gangrenous and putrid processes Not only do they act locally but by the toxins which they secrete as well, they provoke a veritable general poisoning which is evidenced by the symptoms of constitutional infection and in typical cases by an alteration in general condition which may be termed the putrid facies or cachexia In the study of their toxins and by immunization we soon hope to have a serotherapeutic treatment which will be truly rational and efficacious" LeRoy has in progress some work on the same line with which he hopes to be able to verify the above

32 **Compound Fractures**—Moniarta reports a number of cases of compound fractures and urges that when the pathologic condition is not positively demonstrated in such cases, the puncture or laceration be enlarged, the bone fully exposed, approximated and held there, provided the physician is sure of his technique and the patient's condition does not contraindicate it The danger, he thinks, is insignificant while the advantages of the method are great

34 **Digitalis**—That the impression given by some text books that the symptoms of cumulative digitalis poisoning has no real gravity, is erroneous, is held by Zugsmith, who reports a case in which artificial heat was employed with great advantage in counteracting it The theory, however, of the method he thinks was wrong though the results were good

35 **Prolonged Intubation**—According to Rosenthal the rule in intubation should be to remove the tube within five days, unless it be removed by expectoration before and not further required If the tube is required longer than such time it would be hard to say when it should be removed and the case may be held to be abnormal. All cases requiring the tube longer than five days must be classed as cases of prolonged intubation The treatment consists in large doses of strychnia and constant reintubation and extubation daily or every two days with progressively smaller tubes until the case no longer requires it An illustrative case is reported

36 **Carbuncles**—The treatment of carbuncles recommended by Carothers is prophylactic, abortive, medicinal and operative Many cases can be prevented by cleanliness and where damage to the kidneys and liver exist these should be looked after If seen in its beginning the carbuncle can often be aborted by injection of a few drops of carbolic acid, or a white hot needle thrust into the center of the inflammation In more advanced cases he uses a sharpened stick of caustic potash thrust down to the underlying fascia in the center of the carbuncle producing a necrosed crater and this relieving tension and avoiding the more extensive operation of the extirpation The medicinal treatment is the relief of pain by tonics, diet, etc He prefers for the local treatment equal parts of castor oil and turpentine applied to the carbuncle on absorbent cotton or gauze, which is to be kept thoroughly saturated It relieves pain at once so that in most cases no narcotic is required It prevents suppuration He first limits the inflammation and promotes granulation The most rational operative treatment is the burning away of the entire mass with the actual cautery, converting the carbuncle into a burn of the second or third degree He does not look with favor on the cutting operations, especially the crucial incisions or curette, which may do serious damage

38 **Complicated Ovarian Tumors**—Ries reports two cases interesting on account of the diagnostic difficulties, and emphasizes the following two points 1 If a pelvic suppuration appears to be present and the history of the patient gives no clue to its cause, remember suppurated ovarian tumors! This is important because 2, conservative operations which might be successful in simple pelvic suppurations, would fail to cure suppurated ovarian tumors

43 **Two Starvations**—The conditions here considered are rickets and scurvy, and the importance of the early diagnosis of the former is insisted on Rickets is fat starvation, and scorbutus is starvation from the anti scorbutic element, what

ever that may be O Day considers that these disorders are largely caused by artificial foods, and that fresh raw milk from a healthy cow, properly diluted is far better The treatment of rickets is mentioned cod liver oil stands pre eminent as a remedy The child developing rickets should be given from 15 drops to 1 dram three times a day If this is not taken kindly, some other kind of fat is indicated, and bacon comes next in its efficiency Butter and cream can also be given with good effects For scurvy anything that supplies the anti scorbutic element is all that is indicated Fresh raw milk contains this, and fruit especially oranges, is a specific for the disease

44 **Uric Acid Toxemia in Children** —After an analysis of the condition with a table of fifty seven cases, Brandt calls attention to the various conditions which may depend on a uric acid toxemia including, eczema indigestion, urticaria, pharyngitis, tonsillitis joint inflammation, etc In a large proportion of these cases there was heredity He insists on frequent quantitative analysis of the urine, made by a competent man in these cases

50 —See abstracts in THE JOURNAL of March 23, p 832

52 —Ibid

53 —Ibid, p 831

57 See THE JOURNAL of March 30, p 891

63 **Neuralgia** —Hughes objects to the surgical treatment of trifacial neuralgia which he thinks can be generally managed by medical means His chief reliance has been belladonna or its active principle (atropin) aconite, strychnia, large doses of quinin with gelsemium, hypophosphites of iron, with locally ether, menthol, heat and electricity He also uses arsenic in minimum doses and some coal tar anodynes In some cases he has found it necessary to employ large doses of muriate of ammonium after Anstie's method, 30 gr three times a day He has done this often in combination with bromid of ammonium, and found other bromids often useful as alternatives His special objection is to Gasserian ganglion excision which he thinks is unnecessary and inapplicable because trifacial neuralgia is not exclusively a disease of this ganglion or of the fifth nerve and the danger of operation with its uncomfortable side effects are such as should generally prohibit it If he was to suggest a neuro surgical plan of treatment when medical treatment failed, he would prepare the patient for radical relief by securing hopeful consent to combined surgical and neurological treatment, put him or her to bed give chloroform, extirpate the involved peripheral nerves if desirable, keep both eyes closed as long as one would keep them closed after Gasserian ganglectomy keep visitors away, and use proper medication for six to ten weeks The patient should be treated internally and constitutionally as well as locally

70 **Benign Tumors of Skin** —In this article Buxton describes the gross and microscopic appearances of growths such as keratomas, papillomas, akanthomas and the various forms arising from epithelial appendages, sweat and sebaceous glands and ducts The different forms are elaborately illustrated, but the article itself is not suitable for a condensed abstract

72 **Impetigo Contagiosa Bullosa** —The culture and inoculation experiments of Engman with bullous impetigo are reported together with a general description and discussion of the condition In seven out of the eight cases examined, pure cultures of the staphylococcus aureus were obtained in one the streptococcus and a short bacillus normally found in the skin were also found

79 **Paralysis of Anus Sphincters** —Seventy six cases of paralysis of the sphincter of the anus following forced dilatation, lasting from several months up to absolute permanency have been found by Andrews He has also learned of 7 deaths from this cause The dilatations were due to all sorts of methods from simple insertion of the fingers to insertion of the whole hand He says the anus and rectum are in some patients very small congenitally and in others ulceration has dangerously thinned their walls cicatrization has contracted their diameter or disease rendered the tissue fragile In one case a rectal bougie 11 cm in circumference caused the death of the patient. The conclusions he offers are the following 1 There are few internal disorders of such location and importance that they imperatively require the insertion of the hand for the purpose of diagnosis or treatment 2 The case may be so important that the peril of omitting the exploration is greater than the danger of making it 3 In that case the insertion should be made boldly, though with care but it should never be done where such urgent necessity does not exist

81 —See abstract in THE JOURNAL, xxxiv, p 1490

82 —Ibid

83 —Ibid, p 1416

84 —Ibid, p 1491

98 **Uterine Displacements** —Davenport's method of treating uterine displacements with adhesions is a combination of packing and massage followed by the use of a support He places the patient in the Sims' position and packs the vagina firmly with pledgets of cotton soaked in glycerin Pressure is what is required, careful and systematic packing will give this The glycerin relieves the congestion and promotes absorption This first packing is allowed to remain two days If it becomes loose it should be replaced and the treatment should then be repeated and firmer packing substituted This can be left two or three days After two or three of such treatments the condition of the organ should be investigated and what he calls massage be used The patient is placed on the back and an attempt made to dislodge the uterus With a double hook in the anterior lip it is drawn down as far as it can be without too much pain and with one or two fingers in the vagina the uterus is lifted If bands of adhesion are felt, they may be stretched, and lightly massaged and the same done to the masses at the sides This should not be prolonged over a very few minutes, and the same process repeated after two or more treatments Definite results either positive or negative should show themselves in two or three weeks The interval between the two menstrual periods is usually sufficient to demonstrate how much can be done He says it is surprising to see how much stretching of adhesions can be done, what good results can be obtained If the adhesions are very dense and little can be done, and the patient's sufferings marked, an abdominal operation should be undertaken, but it should be a radical one It is better under these circumstances to remove the appendages and to amputate the uterus If this is not done the breaking up of adhesions will not prevent their being renewed

99 **Dysmenorrhea** —Most cases according to Judd, are due to congestive inflammatory disease of the uterus and its adnexa, varying from a simple endometritis to a metritis or perimetritis, or to prolonged inflammation of the adnexa, aided by the local neurotic condition of the pelvic ganglia, which conditions may be congenital, or brought about or aggravated by the inflammatory conditions of the pelvic organs In a certain proportion of cases the neurotic condition is a larger element in the causation of the pain than the inflammatory condition The volume of cause, so to speak, must of necessity vary with the individual

101 —See abstract in THE JOURNAL, xxxv, p 1424

102 **Uretero Intestinal Anastomosis** —In Kirkley's case there was, after abdominal section made for the removal of appendages the uterus being left a combined fecal and urinary fistula with common outlet Owing to the hemorrhagic diathesis, the enormous quantity of pus, and the patient's condition, operative procedure to close the fistula was not to be thought of and free drainage and washing out was relied upon In about two weeks the urine appeared through the fistula and soon after fecal matter, but at the end of twelve weeks the opening had entirely closed, and after the urine ceased to escape through the fistulous opening, it passed per rectum and has done so ever since the operation The general health has been good, bowels regular uterus freely movable though it still gives trouble and hysterectomy may yet be required The operation was made under strictly aseptic measures and it seems impossible that infection occurred at the time and the extensive suppuration that occurred involving the intestines and ureter probably destroying the latter is suggested as having arisen from the intestines A fecal fistula must have formed

into which the divided or destroyed end of the ureter emptied and it seems to be a case in which nature shows us the possibility of an indirect anastomosis with the intestine

103 **Cancer of the Uterus**—The operation described by Bovee is a modification of those of Werder, Ries and Pryor He first uses a vaginal douche of corrosive sublimate 1 to 2000 followed by loose packing of the vagina with bichlorid gauze 2 Abdominal incision, and placing patient in Trendelenburg position 3 Ligation of ovarian vessels at the wall of the pelvis, and securing them at the uterine cornua with forceps or ligatures 4 Separation of bladder from uterus and broad ligament 5, Partial dissection of the ureter from the iliac artery to bladder, and placing two silk loops around each as guides, ligating and severing the round ligaments at the pelvic wall, splitting the broad ligament and ligating the uterine vessels close to the origin of the uterine artery, dividing broad ligaments at the outer ends, cutting away the utero sacral ligaments close to the pelvis, and continuing the dissection down outside the vagina near the vulva The glands and fat are dissected out from all exposed denuded surfaces up to the iliac junction and down to the bottom of the dissection, as well as along the lateral margins and slightly posterior to the rectum 6 Push all loosened structures down into or through the vulva and pack above with sterile gauze Over this gauze suture peritoneal covering of bladder to rectum and posterior margins of peritoneum Close abdominal incision 7 Place the patient in the lithotomy position and, grasping the cervix uteri with a volsella forceps pull out the loosened structures and, by a circular incision through the vaginal wall, meet the edge of the dissection from above The end of the gauze packed in from above is pulled into the vulvar opening for easy withdrawal about the fifth day He has operated 15 times with 1 death and 2 recurrences since March, 1898

115 **Otitic Extradural Abscess**—Randall says that in acute as in chronic cases very extensive intracranial collection of pus can occur with minimum symptoms, and this not only in patients with extra thick mastoid cortex, but in some where the yielding of the bone has been exceptionally quick Free incision of the soft parts may be reserved for cases with fluctuation It should then be employed as a step to thorough exploration of the bony structures, without which the surgeon is in the dark The antrum should be freely opened in acute cases and all the tympanic cavities in chronic, not only for drainage, but for thorough exploration, and every portion of diseased or suspicious bone curetted away If this leads the operator through the inner table to the dura, he should follow the clue without hesitation Extradural abscesses well evacuated are wonderfully harmless as compared to the conditions when confined Five cases which led him to these conclusions are reported

127 **Rectal Reflexes**—Burke reports several cases where reflex symptoms such as backache, pain in the thighs, general lassitude, abdominal pain and general malaise accompanied rectal ulcers and were relieved by their cure

128 **Epilepsy**—From the study of several cases, Lindley concludes that the removal of the ovaries offers very little hope in the great majority of cases of epilepsy, but there is now and then a selected case in which operation is justifiable The removal of the uterus leaving the ovaries intact, according to some investigators is a promising operation and he shall feel inclined to try it in any future opportunity In one of his cases, in a girl 19 years of age in whom convulsions seemed to have special connection with the menstrual periods, oöphorectomy has seemed to produce benefit thus far, though only a short time has yet elapsed

137 **Adrenalin**—After first noticing the work of Abel and von Furth and their products, epinephrin and suprarenin, neither of which was obtained in the perfectly pure state, Takamine describes his adrenalin which he considers the isolated active principle of the suprarenal gland It is a light, white, microcrystalline substance with slightly bitter taste and leaving a slightly numb feeling on the tongue where it has been applied When dry it is perfectly stable It shows a slightly alkaline reaction on moistened litmus paper, is soluble with difficulty in cold water, but more readily in hot, the crystal separating after cooling The colorless aqueous solution is easily oxidized in the air, turning to red and eventually to brown It is easily soluble in the acids or alkalies, but not in ammonium hydroxid or solutions of the alkaline carbonates With ferric chlorid a beautiful emerald green color is produced, which by careful addition of caustic alkali becomes purple or even carmin red Strong acid prevents this reaction, giving only a dirty yellowish green It reduces silver salts and gold chlorid very energetically and turns the liquid red Oxidizing agents such as ferricyanid and bichromate behave the same way He has produced three kinds of salts, hydrochlorates, sulphates, and benzoates by dissolving adrenalin with three different acids, and evacuating, in vacuo, over strong sulphuric acid In the course of time the residues became brown brittle amorphous masses, deliquescent in the air Its physiologic activity is astoundingly strong A solution of 1 to 10,000 blanches the normal conjunctiva in thirty to sixty seconds In intravenous injection produces an enormous rise of blood pressure, and 0 000008 of a gram is equal in its effect to 0 005 of a gram of suprarenal extract Adrenalin administered in quantity of one fourteen millionth part of one gram per kilo of body weight will produce distinct physiologic effects It is the most powerful astringent and hemostatic known, and the strongest stimulant of the heart It is non irritating, non poisonous, and non cumulative, and without injurious effects It has given satisfactory results in the treatment of acute conjunctivitis, some cases of deafness, bloodless operations on the nose, laryngeal phthisis, hay fever, nasal hemorrhage, "bleeders," diseases of the heart, nose and throat, asthma, laryngitis, urethral disease Addison's disease, exophthalmic goiter, etc

138 —**Scopolia Carniolica**—Wood's investigation gives the comparative action of scopolia carniolica or so called "Japanese belladonna," with atropa belladonna and concludes as follows Scopolia carniolica in its physiological action so closely resembles atropa belladonna as to be practically indistinguishable Like belladonna, scopolia elevates the blood pressure, paralyzes the pneumogastric nerve, is primarily a stimulant of the respiratory center, and in fatal dose kills by asphyxia In the frog it is a paralyzant to the spinal cord and to Setchenow's center and when brought in direct contact with a motor nerve lessens its function The dominant alkaloids of the two plants however are probably not identical since we find the scopolia apparently a little more depressant to the spinal cord, and distinctly more toxic

142 —This article has appeared elsewhere See THE JOURNAL of March 30 title 32 p 919

FOREIGN

British Medical Journal, April 27

Remarks on the Training of Ophthalmic Surgeons A FREELAND FERGUS—The importance of proper training for the ophthalmic specialist, especially if there is to be a separate register for them, is noted and the lack of such training in the English system of education remarked Fergus thinks that even in the preliminary education a difference should be made, a better acquaintance with elementary mathematics ought to be required than of the average student and he shows how a knowledge of trigonometry and analytical geometry may be useful and how the lack of it lead to mistakes in text books, articles, etc The earlier years of his medical education should also embrace biology, chemistry, human anatomy including histology, and the physiological course should include adequate instruction in physiologic optics, movements of the eyes, the cerebral mechanism of sight, etc A knowledge of physics is essential and the student should be required to attend an ophthalmic laboratory for at least twelve months, should master such instruments as the spectroscope, spectrometer, sphero meter, and the diffraction grating These are, of course, independent of general medical studies including pathology, therapeutics, etc A course in special pathology is particularly desirable The amount of attendance on formal lectures is difficult to determine, but clinical work should be compulsory and cover a period of at least three years, taken up entirely with examination of patients under competent teachers

On the Advisability of the Inclusion of the Study of Anesthetics as a Compulsory Subject in the Medical Curriculum DUDLEY W BUXTON—At present there is no uniform teaching of anesthetics in Great Britain and the importance of this is insisted upon by Buxton One thing that is especially dwelt upon is "aloofness" from the surgical aspect of the operation, as of paramount importance This does not mean that the anesthetist should neglect being of aid to the operator, but he should concentrate his mental powers upon establishing and maintaining a perfect degree of narcosis without any swerving of his attention from his business, all other matters being secondary He suggests that a resolution be passed by the General Medical Council compelling all medical students before applying for final examination to offer evidences of having studied the practice of some recognized anesthetist This instruction should comprise a course of lectures dealing with the theory of anesthesia, its physiology and practice and include familiarity with common agents, mixtures and apparatus He should also offer proof of having administered nitrous oxid gas ether and chloroform As a minimum an experience of fifty cases might be accepted, at which the student has been present Of these at least twelve should have been conducted by him throughout The student should also have obtained a certificate of proficiency from a recognized teacher The final examination of the students should include tests of their knowledge of anesthetics, both practical and viva voce

On Certain Practical Applications of Extract of Suprarenal Medulla E A SCHAFFER—The writer makes the suggestion that since observations show that this extract has a greater power in causing contraction of the musculature of the uterus than any other drug, whether applied directly or introduced into the circulation it would be very valuable to control hemorrhage and to strengthen uterine contraction in obstetrics The solution he would recommend to be used is an infusion of dry medullary substance, 30 grains to the pint of sterilized water and injected while still fairly hot, he suggests the solution as a powerful styptic and says its efficiency can be still further increased by the addition of 60 gr of calcium chlorid Another use suggested by the same author is in sudden cardiac failure, for the relief of shock, or hemorrhage or an overdose of an anesthetic In these cases the sterilized decoction which may be of the strength of 5 gr to every ounce, must be filtered and should be injected with a hypodermic syringe very slowly into a superficial vein or even in extreme and hopeless cases into the heart itself through the thoracic wall He has seen such remarkable results in animals from this method, among them complete resuscitation of the heart when circulation has apparently ceased that he thinks its trial in the human subject in this class of cases should be called for

The Dietetic Value of Sugar H WILLOUGHBY GARDNER—From the statistics Gardner finds that Great Britain and the United States consume a larger amount of sugar, *per capita* than any other countries and he attributes to this the vigor and robustness of the Anglo Saxon race He goes over the dietetic facts in regard to sugar, showing that it is a muscle food and that it should be used in cases of fatigue, Alpine climbers and Arctic travelers find its use advantageous During the past year he has strongly recommended sugar to patients who he thought would be benefited and has been greatly pleased with the results He mentions a case where it apparently rehabilitated a case of seemingly advanced phthisis after influenza followed by pneumonia and in which the symptoms quickly disappeared after giving 4 ounces per day of pure cane sugar not counting jam and cakes, of which the patient took freely The objections to the diet are mentioned, its effects on the teeth he thinks are due to the impurities and not to the sugar itself Alimentary glycosuria should be watched out for and it is well to test the urine during the treatment In the case of a child with disorders of the mucous membranes it would be contraindicated as well as in decided diabetes and glycosuria In gout and rheumatism he is inclined to think that the prohibition of sugar in the latter may be only due to prejudice In gout the condition is more clear Those who are gouty and fat should avoid sugar like poison, as they can not utilize fats and carbohydrates, but those who are gouty and thin are in a different category One must limit their nitrogenous food, but may give them sugar and starch without much fear There are many who do not fall distinctly in either class, and their diet must be determined experimentally and may have to be varied from time to time

A Preliminary Note on the Hibernation of Mosquitoes H L ANNETT AND J EVERETT DUTTON—Noticing the observations of Wright in regard to the hibernation of mosquitoes, abstracted in our issue of May 4, p 1282 the authors give their own observations They find that the culex and anopheles hibernate during the winter in damp places or old farm houses, built without damp proof courses In this condition the position of both culex and anopheles is peculiar, their legs are spread out on the walls and not in their usual resting positions as in summer They conclude that there is no doubt but that mosquitoes of both genera hibernate during the winter months in England, and Wright shows that larvæ also provide for the continuation of the species during the cold weather

The Lancet, April 27

The Sometimes Successful Treatment of Cases of Apparently Incurable Blindness CHARLES BELL TAYLOR—Galvanization in optic troubles is specially insisted upon by Taylor, who reports remarkable successes in blindness after optic neuritis, corneal ulcers, etc Next to this he would class mercury which may be administered under the form of a blue pill, ointment, vapor, and subconjunctival injections For the latter purpose he prefers the cyanid As a derivative he mentions blood letting, which he thinks is too much neglected, also baths, counterirritants, etc, which distract the attention of the nervous system from the disease The cases he reports are apparently quite remarkable, as regards his success

On Two Cases Bearing Upon the Question of the Limitations of Enterectomy ARTHUR E BARKER—Two cases are reported, one of a woman aged 58 years, suffering from diabetes with 6 6 per cent of sugar in the urine There was a malignant tumor producing stricture of the colon and obstruction of the bowels which was operated upon with removal of four and one half inches of the gut, one inch of this being taken up by the growth The patient bore the operation particularly well in spite of the diabetic trouble and the amount of sugar diminished after the operation Hitherto such a state of things has been held a counter indication to severe abdominal operations The operation was certainly justified in that the patient recovered in spite of diabetes, and its success is gratifying as showing what may be done under such circumstances The second case was that of a feeble old woman aged 76, who had undergone ovariotomy, and from whom about five and one half feet of small intestine were successfully removed for gangrene, the patient making an excellent recovery The advanced age appeared to be no bar to most perfect repair and she did as well as a patient of 50 years younger could have done

Journal of Laryngology, Rhinology and Otology, April

The Treatment of Deviations of the Nasal Septum L J MOURE—The author reports an improvement on the Asch operation for septal deviations In case of existing spurs he removes them with an osteotome of his own devising which consists of a much elongated ring whose ellipsoidal extremity has two opposed cutting edges These are concave externally and very convex on the other side, meeting at an acute angle at the part destined for cutting the fibro cartilage The lower portion of the ring is blunt so that when the spur is well engaged in the lumen and strong traction made the projection is forced advantageously between the blades and is cut very close to the base When the deviation is such as to obstruct the passage and make it impossible to pass the osteotome to enlarge the projecting part, he would begin by making one or two narrow channels by the aid of the galvano cautery point plunged in from before backwards, parallel to the septum This preliminary operation done, he removes with cutting pliers all parts situated externally to the region thus hollowed out thus making an opening sufficient to introduce the instrument

Generally at the time he removes the cartilage he stops the hemorrhage with a galvano cautery knife, placed over the raw surface As a rule the cut surface heals by a pseudo membranous exudate and he does not further touch the nasal fossa, keeping the patient at rest from twenty four to forty eight hours When suppuration occurs he uses the nasal douche every morning When there is present with the deviation not only a spur but a luxation of the fibro cartilage at the anterio inferior part of the septum, after asepsis, etc he incises the mucous membrane at the extremity of the fibro cartilage with a bistoury and detaches it over the lateral parts as far as possible, that is to say from 0 5 to 1 centimeter in depth and to each side The fibro cartilage that is bared is resected with scissors or bistoury, and the cut mucous membranes are united with one or two sutures The wound generally heals in eight or ten days In this procedure it is necessary to be careful to resect the fibro cartilage sufficiently well forward in the nasal fossa, as there is always a tendency to leave a considerable portion which still juts out below the septum When this operation is finished and the patient has recovered, the spur only remains to be removed in the way already described When these wounds have healed and cicatrization is completed that is in about a month he attacks the deviation Eight days before operating he sprays the fossæ night and morning with a solution

℞	Oleate of cocain	15
	Powdered menthol	25
	Thymol	5
	Oil of vaselin	45

In operating, after antiseptic/zing and cleansing with boracic acid douche and cocainizing, the fibro cartilage is cut without further anesthesia in the following manner With a pair of curved scissors, made on the principle of the Asch shears, he introduces the blades, one into each nostril and cuts along the base of the septum as close to the base as possible for a distance of 2 or 3 c c beginning a little back from the nostril Then without withdrawing the scissors he passes them to the superior part and makes a clean incision, having an acute angle with the first cutting right through the fibro cartilage There is then a movable fragment held in the front by the anterior base of the septum and behind by the peripheral plate of the ethmoid and the vomer He then takes a special tube dilator, formed of two parallel blades, the outer rigid and the inner one much longer and made of a malleable metal, which he can mould to suit This he introduces on the side of the deviation, the fixed part turned inwards and the malleable part toward the deviation The tubes are made rights and lefts to suit each nostril Having thus introduced the tube he models the soft part by the help of forceps introduced with his dilator into the shape he wishes the septum to take in its new position The tube is left in this position for seven or eight days The operation is performed exceedingly rapidly and is not attended with much hemorrhage The only inconvenience is in the pain from the inflammatory reaction following the operation during the first forty eight hours He advises his patients to keep to their rooms during the first few days and frequently bathe the nose in boiled boracic lotion, which takes the place of wet dressings The method has the advantage over Asch's in not obliging the operator to remove the tube in twenty four to forty eight hours and facilitating drainage by the two sides of the tube being joined simply at their anterior and posterior parts After two or three days the patient can generally go about his business if the cicatrix goes on in a normal manner, but if there is a tendency to become purulent or to accumulate it is best to wash twice a day with boiled boracic lotion If there is neither suppuration nor secretion it is best to use no local treatment and remove dried secretion only every one or two days with aseptic gauze introduced with bent forceps Generally after the eighth day he removes the apparatus and the septum is perfectly corrected as is also the external shape of the nose The patients often breathe better on the side operated on than the other He has employed this operation for several years, mostly with success, especially in adults In children the results have been less brilliant on account of their restlessness or intolerance of the apparatus or because the septum, not completely developed at this age, has grown deformed afterwards He thinks it is not wise to touch the septum of children before its development is a little nearer completion, that is to say before 16 or 18 years The presence of the tube may cause some pain, but that can not be prevented The hemorrhage is so slight that it may be entirely neglected

Progres Medical (Paris), March 6

Influence of Lead Poisoning on Offspring —Bourneville, in an editorial, quotes Paul's statistics to prove that the children of parents suffering from lead poisoning are doomed to certain death in nearly every case Only 10 children were born alive in 141 pregnancies in which the father, and only 1 out of 27 pregnancies in which the mother was a chronic sufferer from lead poisoning Six women who had previously borne 10 healthy children passed through 43 pregnancies after lead intoxication with only two living children and both of these sickly The French authorities have been collecting statistics in regard to the offspring of painters who have to handle white lead, and it was found that only 15 children had survived the third year, out of 141 pregnancies The records show that in thirteen years, 5484 painters have become affected and, leaving aside the insane, paralytic and idiots, the deaths alone amounted to a total of 598 Bourneville adds that he is now collecting personal data to demonstrate the influence of the profession of house painter on the production of idiocy

Bulletin de la Soc des Hop de Paris, March 21

Infectious Origin of Zoster Fever ACHARD —In two cases of idiopathic zona the same bacillus was cultivated from the cerebrospinal fluid of each patient This cutaneous trophoneurosis may prove to be traceable to infectious changes in spine and meninges, affecting the nerve roots or centers

Changes in Size of Right Cardiac Auricle Determined Posteriorly TEISSIER —A number of hitherto puzzling facts in the pathology of the lung are explained by the mechanism of the dilatation of the right auricle Teissier has found from clinical experience, confirmed by experiments on the cadaver and radiography, that the right auricle always enlarges backward, towards the spine, and that it produces a characteristic area of dulness in the back, in the sixth, seventh and eighth intercostal spaces Percussion should be parallel to the spine at first to determine the outlines of this rectangular area of dulness It may be the first sign of cardiac insufficiency, as the weakness of the myocardium entails the dilatation of the right auricle in certain cases He recently observed an instance of this in a patient dying from typhoid fever The auricle is most enlarged perhaps, in the asystolic period of mitral stenosis, in case of adhesions of the pericardium or by a reflex dilatation But the auricle produces the area of dulness described even when only moderately enlarged The variations in the dulness from day to day afford valuable information for the prognosis The compression of the pulmonary veins by the enlarged auricle in some cases may explain the puzzling congestion at the apex of the right lung noted in typhoid fever and la grippe principally The myocardium relaxes under the influence of the infection, with resulting dilatation of the right auricle The congestion of the lung accompanying a cardiac affection always shows a marked predilection for the right side It is localized sometimes at the base or exclusively at the apex or generalized This localization is probably dependent on the group of pulmonary veins the upper, lower or both compressed by the enlarged auricle

March 28

A Cured Case of Tubercular Pericarditis RENDU —The patient was a man of 34, originally robust, but addicted to liquor, with a tubercular lesion in the lung The protuberance of the precordial region and left half of the thorax with the intense dyspnea at the slightest effort suggested a large pericarditic effusion This diagnosis was confirmed by the increased area of dulness which extended from the third intercostal space to blend with the liver and lung dulness About 800 gm of fluid were removed by puncture and later, 1250 c c The canula was left in place the second time and 1 gm of pure camphorated naphthol was introduced through it into the peri

cardium The reaction to the naphthol was marked For four days there were tachycardia, small pulse and pallor suggesting imminent syncope By the fifth day, however, the patient began to improve rapidly

April 4

Spinal Cocainization in Sciatica and Tabes—Several members of the society reported that they had successfully applied spinal cocainization for the relief of sciatica and the fulgurant pains in tabes Marie injected 5 mg of a 1 per cent. solution The pains vanished for six hours and the general course of the affection seemed improved Others reported that the sciatica recurrd in two weeks with all its former intensity Sicard abolished the pain for three weeks in one case by injection of 4 c c of saline solution

Echo Medical du Nord (Lille), March 24

Restoration of the Lacteal Secretion by Electrotherapy BEDART—In eleven out of thirteen patients who found their milk drying up in the second or third month Bedart succeeded in restoring the flow by the application of static electricity to one or both nipples for fifteen minutes daily for a few days

Presse Medicale (Paris), April 10

Variations in the Physical Signs in Various Stages of Mitral Stenosis E BARIE—The sound of the opening of the valve is imperceptible in the first and third stages but is frequently audible in the second The diastolic roll is deep in pitch and tone in the first much sharper in the second and inaudible in the third stage The first sound is snapping in the first hard in the second and absent in the third stage The second sound is reduplicated with aortic precedence, in the first stage In the second there is no reduplication but the sound is accentuated at the pulmonary artery In the third the reduplication reappears with pulmonary precedence

Revue Medicale (Montreal), April 10

Peroxid of Hydrogen in Acute Urethritis L RHEAUME—The moral effect on the patient as he sees his urethra so thoroughly cleansed of pus by the hydrogen peroxid is an important element in the treatment of acute urethritis The injection causes much less trouble than the usual irrigation, and to say the least it is fully as effective As the patient reclines it is much more comfortable Rheaume uses one part of the peroxid to three of water and 1 cg of cocain to 30 c c of the fluid. He injects 10 to 15 cg and his results have far, surpassed those attained with other treatments

Centralblatt f Chirurgie (Leipsic), April 20

Value of Aluminum Bronze Wire in Surgery R PICHLER.—Silver for sutures has been completely supplanted by aluminum bronze wire in Mikulicz's clinic Tests with various bacteria sown in Petri dishes showed that a sterile zone always surrounded pieces of silver, copper or aluminum bronze wire introduced, and that the zone was always widest around the latter The development of the colonies was also slightly checked at some points Clinical experience has corroborated the results of the tests The alloy used contains 85 per cent. copper and 5 per cent aluminum

Dermatologische Zeitschrift (Berlin), April

Treatment of Syphilis with Specific Serum E MOORE—For seven years Moore had been testing and experimenting with the serum from syphilitics as a cure for the disease It has never failed to arrest the symptoms and is a valuable differentiating measure for chancre as its local application produces a marked change in a day or two with cicatrization in a week while it has no effect on soft chancre He derives the serum from syphilitic subjects by applying a blistering plaster, and injects 10 to 40 c.c every third or fourth day He has been enthusiastically convinced of the great value of this serum treatment for a long time but has not proclaimed it nor adopted it in general practice as he remarks "until he had passed it through the sieve of the Congress"—the recent Latin American Congress at Santiago, Chili where he made a detailed report with numerous demonstrations His experiences include about seventy five cases thirty of which are fully described in this article.

Deutsche Med Wochenschrift (Leipsic), April 18

Cardiac Neuroses A SCHMIDT—The pulse in heart neurasthenics frequently becomes accelerated with no apparent cause It may be accelerated or retarded under the influence of emotions and movements It may also be accelerated by pressure on some painful point and retarded by stooping The modifications in the pulse during breathing, Schmidt announces, are an important aid in differentiating these neuroses During deep inspiration the heart action seems to stop completely and the tracing of the pulse is nearly a straight line in some cases In others the pulse persists, much retarded and the tops of the tracings are rounded He also calls attention to the frequent coincidence of a sedentary occupation which requires stooping, with a cardiac neurosis This favors abnormal mobility of the heart and explains the network of congested veins frequently observed in the cardiac region in such patients

Imperfect Oxidation of Sugar without Glycosuria P MAYER—If urine contains no sugar and merely considerable glukuron acid, it has been accepted as evidence that the transformations of sugar in the organism are proceeding normally Mayer announces that the blood contains "glukuron" acid in some combination and that sulphuric acid liberates it He is now engaged in attempts to isolate this combination from the blood In the meanwhile, he states that he has established that the presence of "glukuron" acid in the urine is an evidence of defective oxidation of sugar

Revista Medica de Uruguay (Montevideo), February

Cutaneous Isothermia and Cryanesthesia as Symptoms of Exophthalmic Goitre J DE LEON—This writer has noticed in every case of exophthalmic goiter which he has had occasion to observe, that the peripheral temperature is the same or higher than the axillary The patients are also peculiarly insensible to cold They frequently mention that their exceptional resistance to cold had been noted some time before the first manifestations of their disease This cryanesthesia subsides as recovery progresses

Gaceta Medica de Mexico, April 15

Rarity of Typhoid in Mexico A GAVINO—Mexican physicians have always expressed surprise that in spite of the contaminated drinking water, typhoid fever is of extremely rare occurrence in Mexico Some have believed that the typhoid bacillus must produce a clinical picture differing from the usual type elsewhere Gavino now reports that in his eighteen months of service at the Institute of Pathology, the typhoid bacillus has never been found once in the innumerable specimens sent for investigation, nor at the autopsies, nor were any lesions ever discovered in cadavers with typhoid characteristics The bacillus, however was omnipresent

Books Received

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them A selection from these volumes will be made for review as dictated by their merits, or in the interests of our readers

CHRONIC URETHRITIS OF GONOCOCCUS ORIGIN By J DeKeersmaecker Chief of Service Diseases of the Urinary Organs at the Centralklinik of Antwerp and J Verhoogen Agrégé at the University of Brussels Translated and Edited with Notes by Ludwig Weiss M D Attending Physician to the Genito-urinary and Skin Service German Poliklinik Cloth Pp 251 Price $2 75 New York Wm Wood & Co 1901

DISEASES OF THE HEART A Clinical Text Book for the Use of Students and Practitioners of Medicine By Edmund Henry Colbeck, B A. M D., Cantab M R C P London D.P H Cantab Physician to the Out Patients at the City of London Hospital for Diseases of the Chest. With 43 Illustrations Cloth Pp 341 Price, 12 shillings London Methuen & Co 1901

THE THEORY AND PRACTICE OF MILITARY HYGIENE By Edward L. Munson, A.M., M.D Captain Medical Department, United States Army Illustrated by 8 Plates and Nearly 400 Engravings Cloth Pp 971 Price, $8 00 net New York Wm Wood & Co 1901

A TEXT BOOK OF GYNECOLOGY Edited by Charles A L Reed A.M M.D., President of the AMERICAN MEDICAL ASSOCIATION (1900 1901) Illustrated by R J Hopkins Cloth Pp 900 Price $5 00 New York D Appleton & Co 1901

THE STOCK POISONING PLANTS OF MONTANA. A Preliminary Report by V K. Chestnut and E V Wilcox. Paper Pp 150 Washington Government Printing Office 1901

TRANSACTIONS OF THE ONE HUNDRED AND ELEVENTH ANNUAL MEETING OF THE MEDICAL SOCIETY OF DELAWARE, Held at Rehoboth, June 12, 1900 Paper Pp 31 Wilmington, Del Sunday Star Print 1900

PROCEEDINGS OF THE PHILADELPHIA COUNTY MEDICAL SOCIETY *February, 1901* Paper Pp 50 Price, $0 15 per copy Philadelphia Published by the Society

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New Patents

Patents of interest to physicians, April 16, 23 and 30

672,317 Speculum Willard E Dow Braintree, Mass
672,207 Syringe Jesse A Dunn, Chicago, Illinois
672,322 *Inhaler for menthol or similar substances* Theodor H Gellhaus, Bant, near Wilhelmshafen, Germany
671,999 Hernial truss Francis J Hage, Jr, Goldsboro, N C
672,377 Dilator William D Kearns, Pittsburg, Pa
672,177 Inhaler Wm H Metcalf, New Haven, Conn
672 151 Anesthetic inhaler Edward M Morgan, Westmount, Canada
672,239 Vaginal speculum Charles J Pilling Philadelphia, Pa
672,391 Abdominal supporter Wilhelm J Teufel, Stuttgart Germany
34,364 Design, syringe nozzle Pemberton Lundy, Boston, Mass
672,672 Medicated salt rock Charles O Green, W P Wickline and J B Laton, Centerpoint, Texas
672,454 Pasteurizing machine Nelse N Nelson, Ann Arbor, Mich
673,021 Inhaler Wm B Hidden Boston, Mass
673,321 Syringe nozzle, Isaac N Lincoln Providence, R I
673,366 Invalid or surgical bed Adolfo Luria, Chicago
673,100 Invalid s walking chair, James D Tyler, South Berlin Mass
34,439 Design, massage brush, Margaret Stonebridge, Garrison, N Y

The Public Service.

Army Changes

Movements of Army Medical Officers under orders from the Adjutant-General's Office, Washington, D C, April 25 to May 1, 1901, inclusive

Alfred E Bradley captain and asst surgeon, U S A, detailed to represent the Medical Department of the army at the tenth annual meeting of the Association of Military Surgeons of the United States, to be held in St Paul, Minn, May 30 to June 1, 1901

John Carling, captain and asst surgeon Vols recently appointed, relieved from duty with the 35th U S Vol Infantry, to proceed to Manila, P I, for assignment

Joseph J Curry, captain and asst surgeon, Vols, *leave of absence* extended

Calvin DeWitt, lieut col, and deputy surgeon general U S A, detailed a member of the board at the Army Medical Museum building, Washington, D C, to examine candidates for admission into the Medical Department of the army

James D Glennan, major and surgeon, 38th Infantry, Vols, (captain and asst surgeon, U S A), detailed a member of the board of Medical Officers convened in Manila, P I, for the examination of candidates for admission into the Medical Department of the Army, vice Major Wm F Lewis, surgeon, U S Vols (captain and asst surgeon, U S A), relieved

Leonard K Graves captain and asst surgeon, Vols now in Brooklyn, N Y to duty in the Division of the Philippines, via San Francisco, Cal

John Van R Hoff, major and surgeon, U S A, detailed to represent the Medical Department of the Army at the tenth annual meeting of the Association of Military Surgeons of the United States, to be held in St Paul, Minn, *May 30 to June 1, 1901*

Richard W Johnson, major and surgeon, U S A member of a board convened in Manila, P I, to examine officers of the army for retirement

Henry S Kilbourne, major and surgeon U S Army, member of an examining board at the Presidio of San Francisco, Cal, vice Lieut Col B F Pope, deputy surgeon general, U S A, relieved

Charles F Mason, major and surgeon 26th Infantry Vols (captain and asst surgeon U S A), relieved from further duty with his regiment, to report to Lieut Col Calvin DeWitt, president of the examining board at the Army Medical Museum building, Washington, D C, for examination for promotion

John A Metzger, *major* and surgeon Vols, recently appointed relieved from duty with the 35th Infantry Vols, to proceed to Manila, P I for assignment to duty

Lorin B Ohlinger, contract surgeon, now at the U S General Hospital Fort Bayard, N M, to report to the *commanding officer* of that hospital for duty

Junius L Powell major and surgeon, U S A member of a board convened in Manila, P I, to examine officers of the army for retirement

Willis J Raynor captain and asst-surgeon Vols, for duty at Fort Washakie, Wyo, to San Francisco, Cal, en route for the Division of the Philippines

Charles Richard, major and surgeon, U S A, detailed to represent the Medical Department of the Army at the annual meeting of the American Medical Association to be held in St Paul, Minn, *June 4 7, 1901*

Hugo C Rietz, dental surgeon, from Washington, D C, to San Francisco, Cal en route for *duty in the Division of the Philippines*

Limer A Scherrer contract surgeon, from Fort Grant, Arizona, to Fort Washakie, Wyo, for post duty

A B Smith, contract surgeon, leave of absence granted

Frederick H Spatzenberger, captain and asst surgeon, Vols, recently appointed and now in San Francisco, Cal, to duty in the Division of the Philippines

H H Stromberger, contract surgeon, leave of absence granted

Najib Taky ud Deen, contract surgeon, from Columbus Barracks, Ohio to San Francisco, Cal, for duty with troops en route to *Manila*, P I, and for assignment in the Division of the Philippines

William H Ware, dental surgeon, from Washington, D C, to San *Francisco*, Cal, en route for duty in the Division of the Philippines

Starling S Wilcox, contract surgeon, *now at Columbus, Ohio*, to duty at Columbus Barracks, Ohio

Timothy E Wilcox major and surgeon, U S Army, detailed to represent the medical Department of the Army at the annual meeting of the American Medical Association to be held in St Paul Minn, June 4 7, 1901

Robt E Williams, captain and asst surgeon, Vols, recently appointed, from Fort McDowell Cal, to Manila, P I, *for duty in* the Division of the Philippines

Navy Changes

Changes in the Medical Corps of the Navy for the week ending May 4, 1901

Asst Surgeon B L Wright, ordered to the *Massachusetts*, May 1

Asst Surgeon S S Rodman, detached from the *Adams*, and ordered to the *Alert*, May 11

Surgeon H L Law, retired detached from the Recruiting Rendezvous, Buffalo, N Y, and ordered home

Marine Hospital Changes

Official list of the changes of station and duties of commissioned and non commissioned officers of the U S Marine Hospital Service for the seven days ended May 2, 1901

Surgeon D A Carmichael, to assume temporary command of the San Francisco quarantine station

P A Surgeon C P Wertenbaker, to proceed to Prescott, Ark for special temporary duty

P A Surgeon J B Greene, detailed for temporary duty in the Bureau

Asst Surgeon V G Heiser to proceed to Norfolk Va, for special temporary duty To proceed to Quebec, Canada and report to the United States Commissioner of Immigration for duty

Hospital Steward W E Schlaar, granted leave of absence for twenty six days

Health Reports

The following cases of smallpox, yellow fever cholera and plague have been reported to the Surgeon General, U S Marine Hospital Service during the week ended May 3, 1901

SMALLPOX—UNITED STATES AND INSULAR

California San Francisco, April 13 20, 2 cases
Illinois April 20 27, Chicago 9 cases, 1 death, Freeport, 1 case
Indiana Evansville April 20 27 1 case
Kansas Wichita April 13 20 30 cases
Kentucky Lexington, April 20 27 2 cases
Massachusetts Fitchburg, April 13 20, 2 cases Holyoke April 20 27 1 case
Michigan Bay City April 13 20, 5 cases Detroit, April 20 27, 1 case, at 94 places present
Minnesota Minneapolis April 16 22 8 cases
Nebraska Omaha April 13 20, 11 cases
New Hampshire Manchester, April 20 27 5 cases
New York New York April 13 27, 94 cases, 18 deaths
Ohio Cincinnati April 19 26 4 cases
Pennsylvania Allegheny City, April 12 19 3 cases, Johnstown, April 13 20 1 case Philadelphia April 13 27, 12 cases 2 deaths Steelton, April 20 27, 1 case Williamsport April 20 27, 3 cases
Tennessee Ducktown April 20 present Memphis April 13 20, 24 cases Nashville, April 20 27 14 cases
Utah Salt Lake City, April 13 20 17 cases
Philippines Cebu, March 12, 5 cases, 1 death Manila March 8 16 8 cases
Porto Rico To April 10 Aguas Buenas 4 cases Ciales, 1 case Isabella, 4 cases Manati, 1 case, Ponce 34 cases San Juan 6 cases

SMALLPOX—FOREIGN

China Hongkong March 8 23 23 cases, 10 deaths
Colombia Panama, April 15 22 5 cases 3 deaths
Ecuador Guayaquil March 2 23, 3 deaths
Egypt Cairo March 25 April 1 2 cases
France Paris April 6 13 7 deaths
Great Britain England—Liverpool, April 6 13 2 deaths Wales—*Cardiff* March 8 30 6 cases 1 death Scotland—Dundee, April 6 13, 2 cases Glasgow April 12 19 6 deaths
Mexico Mexico April 7 14 1 death
Russia St Petersburg March 30 April 6, 14 cases, 3 deaths Warsaw March 23 30, 5 deaths
Straits Settlements Singapore, March 2 16 1 death

YELLOW FEVER

Mexico Vera Cruz, April 8 16, 1 death

PLAGUE—FOREIGN AND INSULAR

Australia Adelaide Feb 28 1 case
China Canton Feb 28 epidemic Chan Tsin, Feb 28 epidemic, Fatshan, Feb 28, epidemic Hongkong, March 8 23 22 cases 21 deaths
Straits Settlements Singapore March 7-16, 2 deaths
Hawaii Honolulu, March 29 1 death
Philippines Manila, March 8 16, 10 cases, 8 deaths

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PRELIMINARY REPORT OF THE COMMITTEE ON ORGANIZATION

The report of your Committee herewith submitted contains suggestions and recommendations which are made with full appreciation of the responsibility assumed Your Committee has from the outset keenly realized the magnitude of the task to which it was set but it has been spurred on by the hope that its work, if wisely and conscientiously performed, might if favorably received by the ASSOCIATION result in lasting benefit to the medical profession of America Actuated by this motive the Committee, after full consideration of the problem entrusted to its care, early reached the conclusion that it would be useless at this late day to suggest the adoption of either half-way or compromise measures Thus its report will be found to contain recommendations that to many who have not studied closely the defects of present-day medical organization may appear radical

In order to frankly lay before you a compact scheme of effective organization, your committee is preparing and will submit for your consideration a completely revised Constitution and By-Laws, such as will be necessary to carry into effect the proposed plan of reorganization

Your Committee proposes that a Business Section shall be constituted, to be known as the House of Delegates, which shall proportionately represent the state societies in accordance with their numerical strength with the addition, also, as directly representative of the scientific work of the ASSOCIATION, of one delegate from each Section It is suggested that the present ratio of representation for the state societies be fixed at one delegate to every 500 members

By the means of expert committees this House of Delegates can deal exhaustively with all the large problems of state medicine Opportunity will be afforded to every state to be heard in full, and free debate without the necessary consequence of tabling the project under consideration Important measures will not be neglected as in the past The states near the place of meeting will no longer wield a preponderating influence The House of Delegates can work every day of the annual meeting, at the same hours that the Sections are in session, without interfering in the least with the scientific work of the ASSOCIATION This House of Delegates will be the "Section of Business," and will be composed of physicians who are interested in the general affairs of the medical profession

Your Committee is endeavoring to provide every possible safeguard for maintaining this new organization as truly representative of the medical profession of all the states and territories Provision has been made against political combinations, against perpetuation in office and against self-election to office If necessary precautions have been neglected, it has not been from any lack of desire on the Committee's part to create a great democratic organization that shall federate the state societies into a compact whole and that shall command the respect of the entire world, but rather from the inherent difficulties of comprehending at once all phases of so involved a subject, and providing fully for all future emergencies

While the Committee has endeavored to make its report so clear as to be readily understood by all, it yet feels some obligation to lay before you a reasonably full outline of the facts which determined its action, and a detailed explanation of the recommendations contained in this report The Committee therefore presents herewith a supplementary *argument,* which it hopes will enable every member to understand the urgent situation that sooner or later the ASSOCIATION, as the representative organization of the medical profession of the United States, must face and settle

The report has been made as brief as is compatible with a clear presentation of the Committee's findings while the supplement is in more argumentative form, designed to meet criticism and to show the present necessity for the action that is urged The report is condensed so as to be readily available for discussion and adoption

The Committee earnestly requests that every member of the ASSOCIATION, before passing judgment on the report, carefully read the facts submitted in the explanatory supplement

In its revision of the Constitution and By-Laws, the Committee is adopting a rearrangement of topics which

* The Committee expects to present the official report, in concise form, at the meeting at St Paul It will be printed and distributed at the first General Session, and will include the Constitution and By laws as revised A decision as to one or two details has not yet been reached, although practically all that is herewith submitted is approved by the Committee

brings these instruments more in harmony with those of other similar organizations Careful comparison will show that the Committee has made as few real changes as possible, endeavoring simply to reform the organic law of the ASSOCIATION in harmony with the recommendations contained in the Committee's report

To further elaborate a complete and effective scheme of uniting the medical profession, the Committee suggests plans for the uniform organization of both state and county medical societies as being directly subsidiary to the plan outlined for the ASSOCIATION itself

If the ASSOCIATION will give its sanction to these recommendations, there will be good reason to hope that in five years the profession throughout the entire country may be welded into a compact organism, whose power to influence public sentiment will be almost unlimited, and whose requests for desirable legislation will everywhere be met with that respect which the politician always has for organized votes With the ASSOCIATION in constant, personal definite, and essential touch with each state medical society, and through them with the societies in every county the profession of medicine can at no distant day demand and receive that respect from law-makers, from government officials, and from the general public to which it is admittedly entitled by reason of its ideals, its education, and its power for doing good to all mankind

Your Committee expected at this time to submit a Constitution and By-Laws revised in accordance with its recommendations, these are not yet complete They will be printed in time for distribution at the St Paul meeting The following embody the recommendations which will be incorporated in the Constitution and By-Laws to be submitted

1 The delegate body shall hereafter be known as the "House of Delegates of the AMERICAN MEDICAL ASSOCIATION"

2 The House of Delegates shall consist of not more than 150 members and shall be created as follows a, one delegate for every 500 members or fraction thereof of the state and territorial societies recognized by the AMERICAN MEDICAL ASSOCIATION, b, one delegate from each of the Sections of the AMERICAN MEDICAL ASSOCIATION, to be elected as are other officers of the Section c, one representative each from the U S Army, the U S Navy, and the U S Marine-Hospital Service

3 Delegates representing the state societies shall serve for two years, one-half, or as near as may be, of such delegates to be elected the first year for one year only

4 Whenever the number of delegates exceeds 150 there shall be such a reapportionment among the affiliated state societies as will bring the total membership of the House of Delegates below that number

5 The House of Delegates—as the Sections—shall hold its sessions daily, from 9 A M to 12 M and from 2 P M to 5 P M, or so much of such time as may be necessary, provided that it shall hold no session on the morning of the first day of the annual meeting, nor during the time of the General Sessions

6 The General Sessions of the AMERICAN MEDICAL ASSOCIATION shall be composed of members and delegates who may be in attendance at the annual meeting, and the time of meeting shall be 11 A M on the first day of the annual meeting, 7 30 P M on the first three days of the annual meeting, and 12 noon (or such other hour as may be agreed upon) on the last day of the meeting, which session shall be for the installation of the officers for the ensuing year and other concluding exercises

7 All the officers of the ASSOCIATION shall be elected by the House of Delegates, but no member of the House of Delegates shall be eligible to any office whose incumbent is elected by that body

8 No one shall be elected a member of the House of Delegates who has not been a permanent member of the AMERICAN MEDICAL ASSOCIATION for at least two years

9 The election shall take place on the morning of the fourth day of each annual meeting

10 No one shall be elected to any office who is not present at the annual meeting at which the election occurs

11 The officers elected shall be installed at 12 o'clock on the last day of the annual meeting

12 The membership of the ASSOCIATION, in addition to the delegates, shall be composed of permanent members honorary members, and associate members

While the Committee fully appreciate the fact that its duties do not extend below the AMERICAN MEDICAL ASSOCIATION, nevertheless it has in the interest of a complete organization considered the state and local societies, and to complete this urgently-required organization of the regular medical profession, offers the following recommendations to the various state and territorial medical societies

a That each state society shall at the earliest possible moment appoint a "Committee on Organization," to which shall be referred, with the ASSOCIATION'S endorsement, the report of your Committee, and especially that part which refers to state and county societies

b That each state society immediately raise funds and employ an organizer to organize the profession in its territory

c That the state societies unitedly agree to federate themselves in the AMERICAN MEDICAL ASSOCIATION and as a preliminary to this adopt a uniform organic law in regard to certain fundamental principles viz, to divide their annual meeting into two branches, legislative and scientific, the legislative branch to be as small as is compatible with representation from all the county societies and to be composed of delegates elected by the county societies

d That membership in the county or district societies shall constitute membership in the respective state society without further dues and that no one be ad-

mitted to membership in the state society except through county or regular district societies

e That funds to meet the expenses of the state society be raised by a *per capita* assessment on the county and district societies

f That a united effort be made to influence special societies to limit their membership to those who support the regular organization, and the seminational and miscellaneous societies to encourage systematic organization by covering a definite territory and also by limiting their membership to supporters of the regular organization

g That each state society create a permanent committee and a fund for the purpose of enforcing all medical laws in every part of its territory

h That each state society co-operate with the AMERICAN MEDICAL ASSOCIATION and with the other state societies in solving the problem now before the profession relating to medical education, medical legislation, reciprocity, licensing etc

Your Committee further recommends that a committee of three be appointed at the St Paul meeting to continue in behalf of the AMERICAN MEDICAL ASSOCIATION, the plans authorized in this report, and to act in conjunction with the large Committee to be appointed by the various state societies Your Committee also presents herewith supplementary arguments in favor of organization, all of which is respectfully submitted

[Signed]

J N MCCORMACK, Bowling Green, Ky
P MAXWELL FOSHAY, Cleveland, Ohio
GEORGE H SIMMONS, Chicago

ARGUMENT

A CONSIDERATION OF THE CONDITIONS, PAST AND PRESENT, UPON WHICH THE COMMITTEE BASES ITS RECOMMENDATIONS

RETROSPECTIVE

The convention, or first meeting of the AMERICAN MEDICAL ASSOCIATION, was held in 1846 and the ASSOCIATION itself was organized in 1847, in the days before railroads and telegraphs had brought about free intercommunication between the various parts of the United States At that time there were comparatively few societies and these were very weak The population of the country was about 20,000,000 and there were probably less than 25,000 physicians of every kind in the entire country During the fifty-five years since the ASSOCIATION was organized, teeming millions have settled and are now living in prosperity on what was then uninhabited country There are now probably 120,000 physicians, and between 1300 and 1400 regular medical societies During this half century nearly all the material conditions of civilization, as well as the methods and needs of our profession, have undergone most radical change

The founders of the ASSOCIATION very properly arranged that the AMERICAN MEDICAL ASSOCIATION should be a representative body and that every ten members of an auxiliary society should be entitled to send a delegate to the ASSOCIATION, and that only these delegates should have any voice in the business affairs of the ASSOCIATION The spirit of representative government has therefore been recognized by the ASSOCIATION from its very inception It was readily appreciated that by this method alone could all parts of the profession secure an equal voice in the determination of the affairs of the ASSOCIATION, and that in no other way would it be possible to keep the total business-doing membership down to a number small enough to expeditiously transact the affairs of the ASSOCIATION Thus it was that the apportionment was fixed in 1847, and it has continued without change for fifty-four years, to the present time In its early life the ASSOCIATION was small enough to transact its affairs in a businesslike manner and to devote much time to the important questions that came before it Its business meetings were not interfered with by scientific orations, nor was there an attempt to cover such a wide field of scientific work as has since become necessary

Looking over the methods of other organizations, such as the secret societies and churches, it is found that those which do the most effective work limit very materially the number of delegates who transact all the business of the national organization No matter if thousands are in attendance at conclaves and synods the actual legislative work is done by a hundred or two men chosen to represent the various state organizations These institutions recognize that representative government is most effectual when the number of members in the actual legislative body is kept down as low as possible The referendum is an excellent method of determining the popular will upon one definite principle, but an impossible means of conducting a profitable discussion upon questions of expediency A small body, if truly representative in its constitution, can effectually deal with difficult problems that could not possibly be satisfactorily disposed of in a large and promiscuous gathering It is not possible for every citizen of the United States to be heard *in extenso* by the nation when it is deciding questions of policy, nor can one citizen in ten be a member of Congress A small well-chosen representative body is the only known means through which concentrated effort can be directed

Why should the AMERICAN MEDICAL ASSOCIATION continue on the basis of an apportionment more than fifty years old? Why should the American medical profession continue in the effort to work through an antiquated organization, when it can readily secure one that is in accord with the spirit of the times, and when it stands so greatly in need of a definite corporate unity that can adequately influence state and national legislation?

OBJECTIONS TO PRESENT CONDITIONS

NO PRESENT RESTRICTIONS OF DELEGATE REPPESENTATION

As the right to vote in the general sessions is limited to delegates who are presumed to represent others, this right should be carefully guarded In all great representative bodies every precaution is taken to restrict the right of voting to those who are entitled to it But at

the annual meetings of the ASSOCIATION this restriction has become an impossibility Registration of all who attend as delegates is such an enormous task that its accomplishment in a satisfactory manner is out of the question if there is the slightest attempt made to scrutinize the credentials While the right of a society to send delegates is verified, attempt to limit each society to the number to which it is entitled would be fruitless This could be done if there were a system of reporting membership, but not otherwise As this system exists in but few states, any attempt at scrutiny in this regard is useless

A large majority of those who attend the annual meetings do so without any authority to represent others Nominally, delegates are supposed to be elected, practically, certificates are granted by secretaries of societies on request of those who desire to attend the annual meeting While this may not be true in a few instances, the exceptions are so few that the rule is as stated

Correct Registration of Delegates Now Practically Impossible—The By-Laws of the AMERICAN MEDICAL ASSOCIATION call for the preparation of the list of delegates for accuracy in calling the ayes and nays At the last meeting over 1600 delegates were registered, and to get such a number in any uniformity for roll-call would be impossible in the time and the calling of such a long roll as the list of delegates makes would take so long that this is now out of the question In *viva voce* voting in the general body it is impossible to tell who are and who are not delegates

Difficulties Increasing Yearly—The above difficulties are becoming more noticeable each succeeding year The number of affiliated societies is rapidly increasing, and with this also the number of delegates increases In brief, the number of delegates has become so great that a verification of the credentials is impracticable, and the separation of the delegates from the few who have not the right to vote is so difficult that the question resolves itself into this Shall the delegates be reduced in number so that they shall make a body that is manageable, or shall the pretense of delegates be done away with and allow all to vote who attend the meetings? The Committee believes that the latter would be preferable to the present conditions

The ASSOCIATION is becoming rapidly larger and the membership is likely to increase much faster in the next year or two than it has in the past four years During the past year (1900) over 5000 subscribers and members were added to THE JOURNAL'S list At least three-fourths of these are eligible to membership and will probably join the ASSOCIATION within a year This increase nearly equals the total membership of ten years ago In other words, those added to the list last year, who have already become members (about 2000) or will probably be transferred to membership shortly, equals the total membership of 1890 It is probable that in five years, if not in less time, the membership of the AMERICAN MEDICAL ASSOCIATION will have reached 20,000

The attendance at the annual meetings has also been rapidly increasing, and this will tend to increase much faster in the future The general meetings have become so large that it can be stated truthfully that the ASSOCIATION is the largest body in the world which attempts to transact business in a deliberate manner

Attendance at General Sessions Sometimes Extremely Small—While the meetings are at certain times too large, exactly the opposite is sometimes true Toward the end of a session, if it is the least tedious, the large majority have gone, and while the business may be ever so important, the number remaining to give the decisive vote is often so insignificant that it would be absurd to call it representative The last day's session often the most important one, is never largely attended, and often there are not present more than thirty or forty at any time on that day

Attendance Fortuitous—Under the present method of apportionment much more than half of the delegates in attendance at any gathering come from the states that lie close to the place of meeting, so that any meeting at present may be controlled by that part of the profession which lives near the meeting-place The composition of the general meeting is fortuitous, depending almost entirely on the location This one defect totally defeats the theory of representative government A body to transact business for the profession of the country should be representative of the whole country and not of the particular territory adjoining the place of meeting

TIME NOT SUFFICIENT

As to time, for many years members have complained that important measures are not properly considered, or are not heard at all, because of the difficulty of dealing with debate in so large a gathering Many valuable measures have been indefinitely tabled, and others have been permanently shelved in one way or another because of the impossibility of reaching a definite conclusion in the face of interminable debate in a large body which is always anxious to get its business done quickly

On the first day the General Session is not scheduled to begin until 11 A M, and the opening exercises and President's Address together with the reports, take up that day's session The average time of the other three days will be less than 2½ hours, making a total of 7½ hours The three orations and the time devoted to opening the meeting will take more than an hour each day This leaves but 3½ hours to be devoted to miscellaneous business, including the necessary reports that come in day by day from the various committees appointed at the meeting The last day's session is nearly always a short one, so that it is believed that the total time allowed for the transaction of business at each annual meeting of the ASSOCIATION does not amount to more than three hours! The fact that important business is neglected and that problems of vast import to the profession and the people are not considered, has been known and appreciated for years[1]

1 "The desirability of having more time and deliberation given to the purely business matters of the ASSOCIATION by a properly organized council or standing committee on business, has long been recognized by all the more experienced members of the ASSOCIATION, and various plans have been suggested from time to time without leading to any definite action" (Report of the Committee on Organization, JOURNAL A M A, June 25, 1887) (At this time there were 3278 members of the ASSOCIATION)

MANY NOT INTERESTED IN MEDICOPOLITICAL QUESTIONS

The average of those who attend the annual meetings have only a platonic interest in medical politics They have no concern about anything in the annual meetings except that which pertains to the Sections, and the trenching on the time of these by the general business sessions is felt to be a disadvantage These men have no interest in medicopolitical questions and would prefer to be in attendance at the Section meetings rather than at the general business sessions The Constitution provides for the closing of the Sections during the sitting of the General Sessions This means that the scientific work must stop at 10 o'clock each morning, and this is against the best scientific interests as at this time the Sections have just fairly started

The General Executive Committee—The General Executive Committee was created in 1892, for the purpose of meeting the above conditions But while this Committee has been of great service, it has not proved a satisfactory solution of the difficulties First, it is difficult to obtain a fairly good attendance of this body Its members are those who are interested especially in scientific work or they would not have obtained the position of chairmen of their various Sections They are especially the ones who are not supposed to be interested in what is termed "medical politics" They are naturally interested in Section work, and will not leave this except for urgent reasons The meetings of this General Executive Committee have been not only poorly attended, but the time it devotes to them is limited, generally between 5 and 6 o'clock in the afternoons Further, the members of this Committee realize that their decisions on questions that are brought before them are not final They therefore do not have nor feel that responsibility which is necessary to insure attendance and careful work The General Session itself is likely to take up and discuss questions that the Executive Committee has considered *in extenso* The Executive Committee therefore can not but feel that its work is largely wasted energy So it is not to be wondered at that the attendance at its meetings is poor

The Nominating Committee—The objections urged in the past against the Nominating Committee and the method by which it is created, make it unnecessary for the Committee to do more than simply refer thereto (See first paragraph of foot-note 2)

In brief the present system of conducting the business of the AMERICAN MEDICAL ASSOCIATION is most unsatisfactory, because 1 It is not representative 2 It detracts from the scientific value of the annual meeting, wasting the time of those who are not interested in medicopolitical subjects 3 The time devoted to the General Sessions does not give opportunity for deliberate consideration of the living problems of the profession of our country 4 The body as now constituted has become so large and unwieldy that it is impossible for it to transact business deliberately and calmly or take up and consider the important questions affecting the medical profession

RECENT ATTEMPTS AT REORGANIZATION

In reviewing the history of recent attempts to bring the ASSOCIATION into closer touch with the profession generally, by reorganization, it is unnecessary to go back of the last fifteen years In the earlier years of the ASSOCIATION's life it appears to have been tacitly taken for granted that it was simply a representative body of the state societies and the medical institutions of the country, and certainly such was the idea at its organization As time has passed, however, the ASSOCIATION has grown away from this ideal, though still nominally a delegate body, it is now in the minds of most of the profession an entirely independent organization, membership in which while still dependent on affiliation with a state or local society, is nevertheless separate from such relations when once attained

For many years those who have the good of the ASSOCIATION at heart have realized that a modification of its general plan was necessary to make it more efficient for the work before it It has been yearly growing of more value as a scientific body, the Sections have increased in number, and in most of these more and better work has been done But other and just as important functions of the ASSOCIATION have been slighted The scientific work has encroached more and more on the time that was once devoted to considering what might be called the "material interests" of the profession, and, as a result, these have been greatly neglected It has been realized also that the great majority of those who attended the annual meetings did so for scientific purposes, and that these had neither the time nor inclination to consider medicopolitical matters, and, as a result important questions that required time and deliberation have been put off indefinitely or rejected without consideration

To meet these conditions several attempts have been made, but with practically no results Fifteen years ago (St Louis, 1886) a committee was appointed for the purpose of presenting a plan of reorganization This Committee had as its chairman one of the founders of the ASSOCIATION, Dr N S Davis, Sr, and at the following meeting (Chicago, 1887) a voluminous report was made This makes a splendid argument in favor of the plan modified in minor details, which will be proposed in this report (Foot-note 2) It recom-

2 The following is quoted from this report See JOURNAL A M A June 25 1887, p 712

"Perhaps no other part of the practical working of the Association has occasioned so much adverse criticism as the hasty and imperfect method of selecting after the commencement of each annual meeting, of the Committee on Nominations by such little groups of delegates from each State and Territory, as could be gathered in some corner of the room in the brief recess of fifteen minutes and on whom devolved the paramount duty of nominating all the general officers of the Association, of seven members of the Judicial Council, three members of the Board of Trustees and the selection of the next place of annual meeting duties that the members are required to commence discharging immediately after their names are announced from the platform as having been selected for that purpose The committee thus hastily appointed, compelled to discharge duties of the greatest importance with equal haste, and then cease to exist, could not fail to commit some errors and to make some injudicious recommendations"

* * * "The three objects of paramount importance to be accomplished by medical organization are *a*, the promotion of direct personal and social intercourse between physicians by which mutual respect, personal friendship and unity of sentiment are greatly promoted *b*, the more rapid increase and diffusion of medical knowledge scientific and practical and *c*, the developing unifying, concentrating and giving efficient prac

mended several important changes, among which was the creation of a "Council," to be composed of two members from each state and territorial society and from the medical department of the Army, Navy, and the U S Marine-Hospital Service, making a body of a little more than one hundred These were to serve two years, one-half being elected at the first for one year only Another recommendation of this Committee was the creation of "members by application," making it possible for membership to be obtained without attendance at the annual meeting (This was the only change finally adopted among those recommended by the Committee) It was also advised that the Committee on Nomination be done away with, its duties being imposed upon this new council

It is interesting to note how this report was at first adopted but how finally it was entirely rejected When it was read at the Chicago meeting (1887), it was adopted almost unanimously The question arising as to whether the Constitution could be changed in this manner without the amendment lying over a year, it was on motion declared that the report could be adopted and its recommendations become operative at once

tical expression of the sentiments, wishes and policy of the profession concerning its educational legal and sanitary welfare and the relations of the latter to the community as a whole As the gathering of all the members of the profession, numbering many thousands, from so widely extended country as ours, into a single society for personal intercourse, is impracticable, the first of these leading objects can only be attained by organization primarily into city, town, county, and limited district societies, in which the necessary personal intercourse can be enjoyed without material expense or being placed beyond the reach of their patients The same object is further promoted by sending a delegation from each of these circumscribed or local societies, once or twice a year, to constitute the State Society, and still further by these State Societies sending delegates to one more protracted meeting each year, which would constitute the National organization Thus by the constant changing of the personality of the delegations, the profession of the whole country is made to feel the genial influence of personal intercourse and mutual respect By the more frequent meetings of the primary local bodies and the more free or informal discussion of all professional topics, a general interest for more knowledge is fostered, and the spirit thus developed is carried by their delegates to the State Societies and these results are carried with the delegates from the State Societies to the National organization For the accomplishment of the third important object to be attained by medical organization, *i e*, unity and concert of opinion, certainly no scheme has been yet devised equal in fairness and efficiency to that which gathers the active working members of the whole profession into primary local societies, from which delegates chosen on a uniform ratio of representation are made to constitute the State Society, and from these again delegates on a similar ratio of representation are sent to constitute the responsible voting part of the National Association, thus constituting a ready professional mechanism through which the views and wishes of the profession can be gathered and efficiently expressed on all questions relating to education, medical legislation and the sanitary interests of the people And the same can be brought to bear with equal force upon the action of legislative bodies, either municipal, State or National The organization of the whole profession we have so briefly outlined, with the great leading object it is designed to accomplish, is but the ideal representation of the actual organization of the profession in this country at the present time The organization of this Association, commenced in 1846, and completed in 1847, is, and has been from the beginning, a representative body with the State and local medical societies in all the States for its essential constituency, or Branches' (if there is any particular merit in that name) It is true the fundamental representative principle was at first imperfectly or unequally applied, in consequence of the comparatively small number of either State or local societies then existing"

Later in the same session, however, the matter having been brought up again, it was decided to lay the report on the table for one year At the next meeting (1888), the recommendation in regard to applications for membership was adopted, but a long discussion taking place the rest of the matter was laid over for another year, and finally in 1889, three years after the Committee was appointed, the whole subject was permanently laid on the table

At the Washington meeting in 1891, an amendment was proposed to make the state societies branches of the ASSOCIATION, which was referred to a committee to report the following year At the next meeting (1892), at Detroit, a substitute for this was offered and adopted, constituting the present General Business or Executive Committee

Several attempts have been made in the past to do away with the Nominating Committee At the meeting in June, 1892, an amendment was introduced with this object in view the duties of this Committee to be imposed upon the General Executive Committee created that year This amendment was laid over for one year, but for some reason it was not called up for two years At that meeting (Milwaukee, Wis , 1893) a committeee which had been appointed the previous year to revise the Constitution and By-laws brought in its report and in it provided that nominations should be made by the Executive Committee The report of this Committee was laid over until the next year In 1894 (San Francisco meeting), after a long discussion the matter was deferred another year, and in 1895, at Baltimore, this amendment, with several others was laid on the table At the last meeting of the ASSOCIATION another amendment looking to the changing of the method of creating the Nominating Committee was introduced and is to be acted on this year

Thus it will be seen that aside from creating "membership by application," which gave a chance for enlargement of the general membership, and the General Executive Committee, nothing has been done in the way of amendment to the organic law to make the ASSOCIATION what it ought to be—the representative body of American medicine By reviewing the history of the attempts made, it will be noticed that failure resulted from slightest opposition, for the reason that this developed a discussion in the general meeting, which took time and produced impatience at the "time wasted," with one of two results, rejection or postponement to another year, and finally indefinite postponement

OBJECTS OF ORGANIZATION

The objects to be gained by organization are splendidly outlined in the following paragraph taken from the report of the Committee on Reorganization, which was made to the ASSOCIATION by Dr N S Davis in 1887

"The three objects of paramount importance to be accomplished by medical organization are *a*, the promotion of direct personal and social intercourse between physicians, by which mutual respect, personal friendship and unity of sentiment are greatly promoted, *b*, the more rapid increase and diffusion of medical knowl-

edge, scientific and practical, and *c*, the developing unifying, concentrating and giving efficient practical expression of the sentiments, wishes and policy of the profession, concerning its educational, legal and sanitary welfare and the relations of the latter to the community as a whole"

The need of organization from a social point of view will be discussed when we consider local societies

The scientific, as far as it relates to the AMERICAN MEDICAL ASSOCIATION, is satisfactory as it is with probably one or two slight changes in regard to Section work There is no necessity of organization for the creation of more special and general scientific bodies as such, but there is a necessity for more encouragement of scientific work in the local societies In these it is believed that much more work could be done, if an attempt were made to carry on what might be called post-graduate instruction among local societies There is certainly a great need that some way should be devised to reach those engaged in medical practice in small towns, villages and in isolated places There is need of missionary work among those practitioners who have, on account of their environments or from other necessities, withdrawn from or been deprived of scientific intercourse with their fellows By the elevation of the condition of such men the profession as a whole is benefited

Without, however, ignoring the importance of the sociologic and scientific functions of organization, attention is called particularly to the medico-ethical and medicopolitical objects which should be much more prominent in the minds of the members of the profession than they now are These objects include not merely the questions of conduct of physicians toward one another and toward the public, but their views, impressions, or attitude in regard to legislation which may affect them and the medical welfare of the community

These include medical education, the defense of the public against impostors of every kind, the regulation of medical practitioners to insure proper qualifications by enforcement of medical laws, reciprocity, etc

MEDICAL EDUCATION

As is well known, the question of medical education was taken up by the ASSOCIATION early in its existence, and much was done to raise the standard, but in recent years little has been attempted At the present time there are altogether too many medical colleges, and one of the greatest dangers which now threatens the medical profession in this country is found in just this fact This is not due alone to the pouring into the profession each year thousands of illy-prepared men, with a lesser proportion, it may be, of those who are really fitted for their life-work, but in the commercialism, the strife, the petty ambitions and general demoralization which go with these, including free dispensaries, free clinics, and free hospital service The evils are brought on by ourselves and can be corrected only by our own efforts There is to-day, however, no way for the profession of the country to act upon this question in an organized capacity The physicians connected with the medical colleges organized some time ago a medical college association and this body has done much good, but it is realized by those connected with it that it has failed in some of the important measures it undertook to carry out The question is one that can not be settled by legislation, nor by public sentiment, but by professional sentiment, and when this can be created in the right way and a solution of the question proposed, professional sentiment will carry out the plan adopted Just what that may be is not to be considered here, but that it is a question which can be solved can not be denied if the whole profession attempts to solve it

MEDICAL LEGISLATION AND RECIPROCITY

We have here a peculiar position There are fifty different territorial subdivisions, if the District of Columbia and the territories are considered with the states, and no two of them have the same medical laws Yet there is not a medical law on the statute books of any of the states or territories that was not put there through the efforts of physicians Not that these laws are in any instance exactly as the profession would like to have them, possibly, but nevertheless they are there because the profession worked to have them put on the statute books

It is not supposed that the medical profession is so powerful that its members can say to each legislature, "We want this law and nothing else," but it is powerful enough and has influence enough to get something near what it wants, if it goes after it in the right way

It is presumed that if a few states had a law that was giving satisfaction, it would not be much trouble to get that law passed in those states which had not adopted it It may also be presumed that if the profession asked for the same enactment in every state, and persisted in its demands, it would in time get such a law The profession would be working for a common purpose in every state in the country, and before long the essential features of the ideal law that was agreed upon would be adopted At present, however, there seems to be no way by which the various state societies can get together to consider such a matter

The need of reciprocity comes from the fact that in enacting medical laws in one state, no regard has been had for what might be done in this direction in another Under existing conditions the legislative committee of each state society in its efforts for medical practice acts moves independently, apparently not realizing that the brethren over the imaginary political line may be affected by its acts Each state has been thinking only of its own necessities The fact that such a variety of medical laws have been enacted, emphasizes the lack of any central co-ordinating body to harmonize the action among state societies in this regard If there had been co-operation, the result would have been far more satisfactory and the question of reciprocity a much simpler one This independent action is still going on In one state one amendment is in the course of enactment, while in another this identical provision is being wiped out of the law both at the suggestions of physicians, and the result is a confused jumble of provisions and a cry for reciprocity The result of the miscellaneous medical legislation of the past is that a man may be legally entitled to practice in one state and yet, if he attempts to cross the border into another, he is debarred

from that right unless he passes an examination Those who have been in practice for a number of years, and have forgotten the elementary principles which they were taught when in college, find this condition a disagreeable one These as well as the majority of physicians ask for a remedy, but there is no organized body that can in a representative way take up the discussion of this question and recommend a solution of it

ENFORCEMENT OF LAWS

The enforcement of medical law lies with the profession which created these laws While this may not be accepted as a fact, and in theory it is not true, yet practically it is true and is so recognized by those who have anything to do with the enforcement of medical practice acts

The enforcement of medical laws is of as much importance as their enactments and too much emphasis can not be laid upon the necessity of general organization of the members of the medical profession in order to secure their enforcement There is hardly a state in which the profession has, as an organized body, recognized this as a part of its function While this is the duty of each state society in its own territory it needs also the united action of the bordering states, as has been realized by those who have made attempts to enforce medical laws If an attempt were made to enforce the laws all over the country, it would be a very easy matter for each individual state to enforce its laws, because adjoining states would not then offer a hindrance by their laxness, i e, there would be no opportunity for evaders of one state's law to take refuge in an adjoining state

OTHER OBJECTS OF ORGANIZATION

There are other evils to be met besides those enumerated, such as that which our confrères in England are meeting under what they call the "battle of the clubs" Lodge and club practice is only just beginning to be felt here and the only way in which to meet these is by counter-organization Most of the quackery and fraud in its protean aspects against the people and much of the evils with which the profession of this country is afflicted are the result of apathy and lack of organization Organization will give confidence to make effort, and with this confidence apathy will vanish

There are medicosocial questions that may be worthy of consideration in a national representative body of medical men Among these is the advisability of creating a department of insurance for the superannuated, for the establishment of a home for those among us who, through misfortune, have become incapacitated, for mutual protection in malpractice suits, etc Medicoethical questions are continually arising, such as that now prominently before the profession, namely the giving of commissions Such questions as these should be met fairly and squarely by a representative body qualified to consider them

THE AMERICAN MEDICAL ASSOCIATION'S ANNUAL MEETING

The annual meeting, under the proposed reorganization, will consist of General Sessions, meetings of the House of Delegates, and meetings of the various Sections The House of Delegates will meet at the same hours as the Sections and in effect the House of Delegates will be the legislative and business Section of the ASSOCIATION

THE SCIENTIFIC

The functions of the General Sessions will be practically the same as in the past minus the part which may be called legislative or business Under the new régime the general session, to be known as the "General Session of the AMERICAN MEDICAL ASSOCIATION," will be held at such a time that it will not interfere with the work of the Sections It is proposed that the opening session shall be as at present at 11 A M and be called the General Opening Session This will be devoted to the formal opening exercises, addresses of welcome, etc, and the President's Address The other General Sessions will be held each evening at 7 30, except that of the fourth day, which probably will be held at noon and will be the closing session and for installation of the new officers By changing the time of meeting from morning to the evening, there will be no interference with the morning sessions of the Sections As these general sessions will probably last about an hour, there will be ample time afterward for the Section dinners on Tuesday, and for the other social gatherings on the following evenings At these meetings will be delivered the three orations one each night No general business will be transacted, except that which pertains to the Sections, and to the scientific work of the ASSOCIATION, although action advisory to the House of Delegates may be taken The General Sessions will be composed of both delegates and members

THE LEGISLATIVE BODY

It is to the plan of organization of this division of the ASSOCIATION that the Committee has given the greatest consideration While it may seem to be the creation of a new body and the making of radical changes in the organic laws of the ASSOCIATION, the facts of the ASSOCIATION'S foundation and history do not warrant this conclusion When the ASSOCIATION was organized, it was intended that a small number should be delegated to attend to the legislative matters—business, medicopolitical, etc—of the ASSOCIATION, while the larger number were engaged in scientific work

NAME

At the present time the General Session is composed of members and delegates, its functions are scientific and legislative The separation of the functions necessitates a distinctive name for the legislative body, and the Committee suggests that it be known as

THE HOUSE OF DELEGATES

SIZE

One of the greatest problems to solve was that in regard to how many should constitute the House of Delegates In deciding this question, the Committee primarily recognized that the body must be large enough to be representative, but not so large that it would be unwieldy In attempting to find an example in the affairs of life, it was found that a comparison might be made to the national bodies of the secret orders These

generally consist of less than 150, more often less than 100 Probably a better example and one more appropriate is that found in the political legislative bodies of the states Taking ten of the largest in population we find the number in the lower House of the following states to be New York 150, Pennsylvania, 204, Illinois, 153, Ohio, 130, Missouri, 140, Indiana, 100, Massachusetts, 240, Michigan, 100, Kentucky, 100, Iowa, 100 The national House of Representatives has 357, but from the fact that much of its business is done by committees, the objections to its unwieldiness is eliminated It is, however, only by rigid rules that it can be governed A body that meets, organizes, transacts its business and adjourns in four days must be composed of a less number than this branch of our national legislature The Committee recommends that the House of Delegates shall be composed of not more than 150, the apportionment being made in accordance with this principle It is unnecessary to present further arguments to show that this number is as large as is necessary to make it representative if it is created in the right manner

HOW CREATED

How shall this body be created, and what societies shall have the privilege of sending representatives to it? To go below the state societies is considered unadvisable, for the reason that if such were done, it would be necessary to give delegates to all affiliated with the state societies, as is done now This, of course, is out of the question Certain large societies—for instance, the Chicago Medical Society with a membership of over 1000, and the Philadelphia County Medical Society with a membership of over 750—it might be thought should be represented, but if representation were given to these, others would ask the same privilege If the Philadelphia County Medical Society should be given representation, the Allegheny County Medical Society in the same State, which has over 350 members, might also demand that privelege It is therefore impossible to go below the state societies in any definite form of representation It is, however, not desired that this should be done The great object before us is the federation of the state societies, and this can only be accomplished through a central national body created by them

APPORTIONMENT OF DELEGATES

The Committee, in the first draft of its report, proposed to apportion one delegate at large to each state society, this delegate to be the retiring president of the state society After consultation with others in regard to this proposition, by correspondence and otherwise, it was found that great objection was raised to it Therefore this was finally rejected Another proposition rejected after a thorough canvass of the question was the representative from the Sections At first it was decided that the representatives from the Sections should be ex-officio, as now, and that the retiring Chairman of the Section should go into the House of Delegates for one year This was objected to for various reasons, and the Committee therefore now recommends that instead of the retiring Chairman, each Section shall elect a delegate to represent it in the House of Delegates

In brief, the House of Delegates will, therefore, consist of representatives from the affiliated state societies in proportion of one delegate for each 500 members or fraction of that number, one representative from each of the Sections, to be elected at the time the Section officers are elected, and one representative each from the U S Army, U S Navy and U S Marine-Hospital Service

Regarding apportionment, the Committee had to consider that as organized at the present time, no equitable representation could be given to all the state associations Some of these bodies—Alabama Connecticut, Indiana, New York and Pennsylvania—make membership in the county organization constitute membership in the state These will have an advantage until a uniform plan of organization is adopted Before deciding to recommend the membership of the state society as a basis for representation, the Committee considered the following propositions

1 Base representation on membership in the state society (Adopted)

2 Base representation on the total number of regular physicians in the state, without regard to membership in any society (This was rejected as it would in no way encourage the building up of societies, would not aid in federating the state societies, and would not be representative)

3 Base representation on combined membership of the state and its affiliated societies (This was not accepted because it is too cumbersome, and because there is no way of knowing the number of members of local societies in the great majority of states, under present conditions [3])

4 On the number of members of the American Medical Association in a state (This was rejected as being unfair, not representative, and not recognizing the state society as part of the plan)

The reasons for adopting the first plan mentioned will be further considered when the plan of organization of the county and state societies is discussed

INCREASED REPRESENTATION UNDER NEW PLAN

If the state societies adopt the plan recommended by the Committee, viz, making membership *a*, in the county or district constitute membership in the state society, the majority of these will be entitled to many more delegates than at present For instance, from the statistice that we have been able to gather, California will add about 900 members from the county societies to her present membership, which will give the state four delegates Colorado will be entitled to at least three, if not four, when membership in a county society takes in membership in the state society Iowa will add at least 2000 to her state society list, increasing her rep-

3 The Committee attempted to get statistics in reference to the number of societies in each state and the number of members in each society one object being to consider the advisability of adopting this principle of representation for the present But in spite of every endeavor and much correspondence the results except in a few states were very discouraging Blanks were sent to all known societies but not more than half of them were returned and many of these were only partially filled out This in spite of the fact that in all but a few instances the Committee had the assistance of the secretaries of the state societies Nothing has so impressed the Committee with the need of some system of organization as has this failure to get in touch even for statistical purposes with the local societies of the country

resentation to probably seven Minnesota will add probably 700 from her county societies, which will give her four delegates Missouri will add about 2000, which will give her six or seven representatives Texas will add at least 1000, which will entitle that state to four or five delegates Michigan will add at least 1000, which will entitle that state to five Ohio will add at least 3000, which will entitle her to nine delegates Illinois has recently published a list of the members of all the societies in the state, and from this list it is found that if this state adopts the plan recommended, it will have a total membership of 3800, entitling it to nine representatives

The above figures are based on information obtained from reports gathered by the Committee and are not reliable, but the estimate is made low in each case It may therefore be seen that if the results of the efforts of your Committee are at all satisfactory, the apportionment of one to every five hundred will result in too large a number, and hence very shortly a higher basis of representation will have to be made

FUNCTIONS OF THE HOUSE OF DELEGATES

The House of Delegates, to all intents and purposes, will be the legislative and executive body of the ASSOCIATION and will take the place of the delegate body as it now exists The only change from present conditions will be that the delegate body will be reduced in number and its members elected by the state societies only It will elect all the officers, it will have control of all the affairs of the ASSOCIATION, it will be the mouth-piece to give expression to the desires of the profession of the country in regard to business and legislative affairs, and it will consider other problems affecting the profession from time to time as they arise It will be a confederation of the state societies of the country, which in turn must be a confederation of the local societies in the state Being created by the state societies, it must be responsible to them for its actions

In the revised Constitution, the Committee recommends that the following be incorporated

No member of the House of Delegates shall be eligible to any office in the ASSOCIATION

By adopting this proposition, it is believed that "medical politics" will be reduced to a minimum

The Board of Trustees shall have control of the finances of the AMERICAN MEDICAL ASSOCIATION as at present, and be considered officers of the ASSOCIATION, and therefore can not be elected from among the delegates

The object of this is that there may be thrown around all financial matters as much protection as possible While the Board of Trustees will be created by the House of Delegates, its term of office will extend as now for three years, one-third going out each year Two-thirds of the Board of Trustees will always be independent of the existing House of Delegates and will be in a position to act independently as a protection should that body any year recommend some extravagant expenditure As now the Board of Trustees could expend no money unless so ordered by the House of Delegates, except in the management of THE JOURNAL

The officers shall be President, First Vice-president, Second Vice-president, Secretary, who may and should be editor of THE JOURNAL, Treasurer, and nine Trustees All officers shall be elected for one year, except the Trustees, who shall be elected for three years each, three going out each year The Editor, who should also be, but not necessarily must be, Secretary of the ASSOCIATION, shall be elected by the Board of Trustees (While it is better under present conditions for several reasons that the Editor and Secretary be one, the time may come, in the development of the work of the ASSOCIATION, that the duties should be separated, and hence it is thought best to incorporate the matter in the Constitution as above) All the officers shall be ex-officio members of the House of Delegates, but none of them should have the right to vote except the President, and he only in case of a tie

All the standing committees now provided for will be continued, except the Committee on Nominations, the Committee on Necrology, and the General Executive Committee It is presumed that the House of Delegates will create other committees than the ones now existing, if necessity requires

Membership There will be three classes of members, to be known as members, honorary members, and associate members Membership will be obtained as now provided for under "Membership by Application" Honorary members will be limited to distinguished foreigners, who must be elected by the unanimous vote of the General Session of the AMERICAN MEDICAL ASSOCIATION It must be a distinguished honor Representative gentlemen not Doctors of Medicine, working in the allied sciences, may become Associate Members by a unanimous vote of any Section Honorary and Associate Members will have all the rights of membership, except that of voting in the Sections and in the General Sessions and the right to hold office They shall not be assessed for dues nor be entitled to THE JOURNAL free No one shall be eligible to membership in the House of Delegates unless he has been a member of the ASSOCIATION for at least two years, except delegates at large and representatives of the U S Army, Navy, and Marine-Hospital Service

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THE SUBORDINATE SOCIETIES

The foregoing pertains directly to the AMERICAN MEDICAL ASSOCIATION and indirectly to the state and local societies That which follows relates directly to miscellaneous state and local societies, but only indirectly to the AMERICAN MEDICAL ASSOCIATION The latter does not wish to dictate to these societies, but only to advise A committee consisting of one from each affiliated state society, provided for by a resolution adopted at the Atlantic City meeting, will meet at St Paul on Monday, June 3 The following must be considered as suggestive and advisory to this Committee

THE STATE SOCIETIES

As mentioned at the beginning of this report, the larger Committee on Organization is created by the various state societies, the object being to discuss the problem of organization as it affects the state and its affiliated societies It is presumed that the members of this Committee will be able to intelligently consider the sub-

ject from the point of view of all parts of the country and as it relates to the different conditions existing in the various states, and thus come to an agreement which will be acceptable to all these bodies That which follows is intended especially to suggest to this Committee the conditions that exist and to advise what, in the Committee's opinion, is considered to be the best plan of organization

Before discussing the plan of organization of state and other societies, the Committee thinks it advisable to refer briefly to present conditions

TOO MANY MISCELLANEOUS SOCIETIES

One of the great obstacles to systematic organization is the large number of existing medical societies Of these there are between 1300 and 1400 although with new ones continually starting and with many in that condition of innocuous desuetude which makes it hard to decide whether they are alive or dead, it is impossible to even pretend to any correctness as to the number For the reason that most of these are organized without any common plan and without relationship one to the other, they are a source of weakness and an obstacle to systematic organization

The societies referred to may be classified as *a*, Special, *b*, District, and *c*, Seminational Special societies are necessarily organized for specific scientific work with membership limited to those who are interested in the particular work which these societies are organized to encourage They are purely scientific, with no other pretense They do not interfere with a systematic organization, although there is probably a tendency to a too great multiplicity of these If these could be induced to insist on membership in the county society as a qualification for membership, it would assist very materially in general organization

District societies are of various sizes, generally covering an indefinite territory in a state These, as a rule, are organized with no regard to any plan, and with no relationship to the state or to local societies that may be already in existence in the same territory Such bodies are particularly a source of weakness for the reason that they are antagonistic to strong local organizations in affiliation with state societies Their membership is drawn from struggling local bodies, preventing these most desirable institutions from becoming strong and active, and often resulting in their complete disruption In a systematic scheme there may be an excuse for district societies, in fact that they will be a necessity in some instances, but to be useful in uniting the profession for the general good they must occupy a definite place in the plan of organization

Seminational societies are subject to the same criticisms Such organizations as the Medical Society of the Missouri Valley, the Mississippi Valley Medical Association,[4] and other like bodies which cover an indefinite territory could be made a power if they were given a definite territory and admitted none to membership who were not supporters of their own local and state societies

The various tristate societies as at present constituted, are, with one or two exceptions, a detriment An investigation into one of these revealed the fact that more than half its members are not supporters of their own state society, but are encouraging an organization outside of their own state and much inferior in numbers and in scientific worth The combination of three or more state societies for the common good of all, the meetings being held at a time not to conflict with the meeting of the state bodies, might certainly be desirable if the object were to supplement and not to antagonize the work of the state society If this is the object, however, membership in one's own state society must be a requisite for membership Otherwise they will continue to be a source of weakness and will tend to disorganization

UNIFORMITY IN ORGANIZATION NECESSARY TO FEDERATION

No successful organization of the profession is possible without the mutual co-operation of the national and state societies, it is presumed here that the AMERICAN MEDICAL ASSOCIATION is ready to do its part, what remains is for the state organizations to do their share in the accomplishment of the purpose It is not necessary to use arguments to prove that there is at present no close relationship among the state societies, that each is acting as an independent body, recognizing no other, that no concert of action among them regarding measures that are of mutual importance is possible under present circumstances, and that a federation of the state societies is desirable and absolutely necessary for the accomplishment of their full measure of usefulness [5]

A COMMON PLAN FOR EACH STATE

It will also be accepted as an axiom that before such a federation can become an established fact a common plan of organization must be adopted by all

To successfully accomplish this and have such a common plan accepted by each state society, it will be necessary that each of these bodies shall be willing to sacrifice for the common good certain minor details in their present plan of organization certain preconceived ideas as to what are the objects of the state medical society, and existing methods of procedure of minor importance For without a willingness on the part of all to make some minor sacrifices, there can be no successful issue to the undertaking, and present chaotic conditions with their resulting weakness will continue to prevail

OBJECTS OF STATE SOCIETIES

Before discussing the plan upon which the Committee believes the state societies should be asked to agree, it will be well to consider what are the objects for which a state society is created Judging from a few of these, it would

4 The Committee contemplated the advisability of creating seminational branches taking the Mississippi Valley Medical Association modified and enlarged as to scope and territory as an example The idea was to create say five grand branches as for instance the New England Branch taking in the New England States New York and possibly Pennsylvania the South Atlantic Branch including the Atlantic Coast States, Alabama and West Virginia the Mississippi Valley Branch including the Northern States West of and inclusive of Ohio to and including Colorado and possibly Tennessee and Kentucky the Southern Branch including the Southern States from Mississippi West to and including New Mexico The Pacific Branch including Montana Wyoming Utah Oregon and all West. This grouping is suggestive only It was thought that our country is so large that these semi national societies could be of advantage from a scientific point of view The plan provided for an annual meeting of these branches at such time of year each thought best, but not within three months of the meeting of the AMERICAN MEDICAL ASSOCIATION the latter to meet with these branches in rotation the branch omitting its annual meeting when it entertained the national body The general idea was considered worthy of consideration in the future [illegible] present time

seem that the object is simply to gather together annually a select few of the members of the profession in the state for the purpose of reading and discussing scientific papers Such societies, however, do not appreciate their functions The whole duty of a state society consists in doing all in its power to better the conditions of every individual member of the medical profession in its territory A body whose sole aim and object is to benefit only those who attend its annual meetings should cease to exist, or else change its name and claims so that a state society could be organized that would appreciate its full duty and do it

The state society, by building up local societies and by encouraging them in every way, should make every effort to reach and keep in touch with those who have from their own accord or from the exigencies of their location separated themselves from professional association with their fellows

The state society, representing the profession of the state, should have cognizance of all medicopolitical,[6] social and financial measures affecting the profession, as well as sanitary affairs that affect the well-being of the people It should be ready at all times to oppose measures and undertakings, whether originating in or out of the profession, that have a tendency to degrade it and lower its standard as a scientific body of men, or that would affect the profession disadvantageously in any way

In addition to the above, but not more important, is its function as the great scientific medical body of the state

Hence, as in the organization of the AMERICAN MEDICAL ASSOCIATION, there should be two distinct branches the scientific and legislative

MEMBERSHIP IN STATE SOCIETIES

SHALL MEMBERSHIP IN A LOCAL SOCIETY CARRY MEMBERSHIP IN A STATE SOCIETY?

The Committee concludes that this question should be unhesitatingly answered in the affirmative, believing that every man who belongs to a local society should be eligible to attend the scientific gatherings of the state body without further formality or additional expense

The object of the scientific branch of the state society is the diffusion of medical knowledge among its members The primary purpose of the annual gathering is educational and for the mutual improvement of those who attend, the secondary is social and fraternal There is no reason why every reputable physician should not be welcome at such a meeting, especially when he is considered by his fellow practitioners, who know him best as a desirable member of their local society There can not be, unless the members of the state society desire that that body shall be considered select and exclusive an idea which is as far from their wishes as it would be repugnant were it a fact To make higher professional attainments a qualification for membership in certain exclusive societies devoted to special work may be right and proper, but not in a body which is supposed to be democratic All state societies gladly welcome to membership every reputable regular physician, hence there can be no objection on the point of professional qualification

As far as excluding from the state society those who are not reputable nor ethical, it would seem that limiting membership to those who belong to their local societies is more likely to prevent the admission of such men than the present method of admission Why membership should not be obtainable except through membership in the county society will be considered under "County Societies"

Benefits Resulting from Enlarged Scope of Membership—It may be asked, by those societies which do not now recognize membership in a local society, what advantage will accrue to them if they change to the method recommended

It would increase the membership, and so the influence, of the state society For the purpose of illustration, we take certain states concerning the membership of whose county societies the Committee has secured fairly correct information In the following table is shown the number of members of the state societies in the first column, and in the second the number of members these will have if the present membership of the local societies is included

	No of Members Now	No of Members if Co Soc Members are taken in
California	262	1162
Illinois	800	3800
Iowa	734	2734
Ohio	940	3940

Thus without the slightest effort there will be an enormous increase in membership and influence in these societies, and it is believed that similar gains will be made in a large majority of the states This membership is the result of no extra effort, so it can be readily seen what a membership many of these state societies will have if the efforts that will be recommended later are adopted

FINANCIAL REASONS

As will be seen, the most important result of enlarging the scope of the state society will be the increased revenue This is an important consideration, as now the lack of money prevents the execution of important measures Only a few now contribute to the expenses, whereas these should be divided among the many, for all are benefited

Referring again to the four states above, we find that the annual dues of the California State Society are $5 00, and that with the present membership this brings in $1310 With the county society members added with dues $1, this would amount to $1162, not as much as at present, of course, but how much easier these dol-

5 "A unification of the State Medical Societies as integral parts of the AMERICAN MEDICAL ASSOCIATION would go far toward making easy the solution of many questions of concert of action, and I would respectfully suggest that measures be at once instituted for the development of a much closer relationship between the State and National Societies" (Dr Henry O Marcy's Presidential Address delivered at Detroit, Mich, June 7 1892, and published in THE JOURNAL of June 11, p 727)

6 One of the great needs in every state is the enforcement of medical laws "What is everybody's business is nobody's business is especially true in this regard Quackery in all its forms is plying its nefarious schemes, with no one to say "nay," in spite of the fact that in most of the states much of this quackery could be put down if there was some central body to take hold of the matter and enforce existing laws This is very evident in individual localities in many states All that is needed is organized action on the part of the profession itself In a few instances better laws are necessary, but in nearly all of the states the laws that now exist if enforced, would make radical changes

lars would be paid, compared to the $5 00 now[7] Illinois claims a membership of about 800, and the annual dues are $3 making a total income of $2400[8] If the members of the county societies should be included, and a per capita assessment of $1 were made, there would be an income to the state society of $3800, and yet the assessment on each member would be so small that certainly no one could object to it The annual dues of Iowa are $2, which nets that body $1468 annually, whereas a $1 assessment on the members when membership of the county societies is admitted, will bring in $2734 In Ohio the claimed membership is 940, the annual dues are $2, making the total income to the state society $1880 Admit the members of the county societies and make the assessment $1, and the state society will have an income of $3940

It might not be amiss here to refer to another phase of this question The annual transactions of many of the state societies record the fact that the most discouraging feature is the collection of dues In many societies this is an annual and a very vexed question It is not an uncommon thing for a physician to join a state society, pay his annual fee, and then through non-attendance let his dues lapse for one, two or three years These will then amount to such a sum that it has a great tendency to keep him away from the annual meeting and from becoming an active member again Many societies adopt resolutions every few years remitting past dues, for the purpose of getting such men to come in and renew their membership

The transactions of many state societies show that anywhere from 25 per cent to 50 per cent of the members are in arrears In a circular now before us is an announcement by the secretary of one society to the effect that, while the membership is given as about 725, only 420 have paid their dues and are entitled to the transactions for the year Under the proposed method, the county societies will collect the annual dues, adding to the sum necessary for local expenses $1 for the state society, and this will be paid direct to the state by the county society, as is done by other bodies

THE INCREASED VALUE AND REDUCTION IN COST OF TRANSACTIONS

The added expense for increased membership is very small, consequently the larger the society, the less the per capita expense The publication of the annual transactions is always the greatest item of expense It is well known that the first number of a book is the greatest expense, and the greater the number, the less the cost for each book, the added numbers costing practically but little more than the cost of the white paper As an illustration, the transactions for 1899 cost one society $1 37 for each book printed, whereas if there had been a sufficient number of these books gotten out to supply the added membership under the new arrangement, these books would have cost less than 50 cents each If we take Illinois, which is one of the few states that publish their transactions in journal form, the *Illinois Medical Journal* would have over 3800 subscribers, whereas today it has about 800 The cost of getting out 4000 copies of that journal would be but little more than getting out 1000 copies, the added expense being simply the cost of the white paper, an infinitesimal item for extra press work and the extra mailing The good resulting from reaching such an increased number at but a slight increase in expense, both as it applies to annual transactions in book form and in journal form, is very great The *Illinois Medical Journal* would then have a larger circulation than probably have three-fourths of the monthly medical journals of the country Before leaving this financial phase of our subject, let it be said that the reason so comparatively few physicians associate themselves with a state society is a financial one Unless attendance at the meetings every year is possible, one asks, "What do I get for the $2—to $5—that I pay annually?" The reply is, a volume of the annual transactions, which contains papers that, if they are valuable, are published in the medical journals, and which should not in any event cost over 50 or 75 cents, a feeling that one is helping a good cause, and the honor of membership To secure and retain membership give value received for the annual dues, and make these as low as is consistent with the work done Physicians are business men in some things

LEGISLATIVE BRANCH OF THE STATE SOCIETY

It seems hardly necessary to call attention to the necessity for an active working branch in every state to consider measures affecting the profession in the same way that the House of Delegates will consider measures of national importance Every reason that was brought forward to show the necessity for subdivision of the work in the AMERICAN MEDICAL ASSOCIATION applies to the state societies Questions are coming up continually in each state that should be met by a deliberative body created in such a way as to be representative of the profession of the whole state A few of the state societies already have such a branch, but, as a rule, their delegate bodies are too large In one state, for instance, the various county societies are entitled to send 323 delegates, each county sending one delegate for every five of its members The Committee thinks it is a mistake to have such large bodies, and that if possible their membership should not exceed 75, 50 would be much better The great trouble however, comes from the fact that many states have more counties than this, and it is believed that every county society should have at least one delegate But the number should be as low as is consistent with the number of bodies that are to be represented No state has a larger proportionate representation than one from every ten members, but most of them have one for every five members

The same principle should pertain to the apportionment of delegates in the state society as applies in the creation of the House of Delegates It should be impossible, for any two or three counties that happen to have a large population to be able to dominate the legislative

7 For argument s sake the annual dues are $1 which will make a sum amply sufficient with the increased membership in all states and more than will be necessary in many instances

8 An illustration from a county society is worthy of mention According to the report of the Secretary of the Illinois State Medical Society as published in the *Illinois Medical Journal* the Chicago Medical Society has a total membership of 1078 whereas there are only 187 members of this society who belong to the state body These 187 pay into the treasury annually $561 whereas if all the members of the Chicago Medical Society could become members of the state society the amount received from this making the dues $1 would be $1078 The addition of the membership of this society would increase the membership of the state society, therefore from 800 to 1691

body The Committee believes that a high apportionment, even as high as 50 or 100, would be much better than a low apportionment This would give the small societies one representative, whereas the larger societies would be limited

However, the Committee wishes it understood that it does not consider this fundamental It is simply a suggestion that the smaller body is more valuable for work than the larger body There can be just as fair representation, if it is rightly apportioned, in a small as in a large number

DELEGATES ELECTED FOR TWO YEARS

The Committee suggests, for the purpose of having more permanency in these delegate bodies, that all delegates be elected for two years, one-half to be elected the first year for one year only There is need of more continuous action, and this can only be brought about by a more or less continued membership in the legislative body It is also believed that there should be created in each state legislative body a small executive council which should have cognizance of affairs pertaining to the profession throughout the year and hold quarterly or other meetings, as may be necessary Also, it is believed that there should be more executive work done by the secretary or the president of the state society While at present it may not seem that there is a necessity for this, it is believed that such an active executive committee or officer would be valuable in various ways to the individual members of the profession of the state Above all, however, this continued activity must apply to keeping in touch with the county societies—in fact, it is to this work that the Committee desires to especially call attention

The necessity of imitating the secret orders, churches, trades unions, and other similar organizations, has been mentioned before These bodies continually keep in touch with the subordinate bodies There must be mutual interest shown between the state and county societies, and the latter must always be considered as the protegé of the state society, to be encouraged, built up, and kept active This can only be done by having an executive officer continually at work, presumably the secretary of the state society

Responsibility of the State in the Organization of County Societies—The most important work that now faces us is the organization of county societies, and its accomplishment rests absolutely and solely with the state society The Committee would like to make this proposition as emphatic as possible, for it must be appreciated before any definite results in this regard can be had Most of the state societies occasionally show an appreciation of this responsibility, but it is always in a spasmodic and half-hearted manner There is never anything like a business method adopted The attempts to get physicians to associate themselves with an organization without employing the same methods as adopted successfully in building up other organizations is not business-like A physician is no better and no worse than the ordinary man, and is influenced by like arguments

The successful organization of medical men will depend on the personal work of paid organizers The sending of circulars inviting physicians to organize or join a medical society does no harm, but it seldom does good Once in awhile a gospel tract may convert a sinner, but if so the tract is either extremely convincing or the individual is easily influenced The personal magnetism of the preacher is generally more efficacious We must take things as they are, not as we would have them Those who are not members of the medical societies are not because, for some reason, they do not want to be It will require personal effort and argument to convince some of these to the contrary

THE PRINCIPAL DIFFICULTY A FINANCIAL ONE

The employment of salaried organizers will pay, and the resulting increase of membership will be an increased permanent income The primary difficulty, and one that will be the hardest to meet, is that of raising funds to pay an organizer at the beginning Few, if any, societies have funds for such a purpose It is this that will block any action unless extraordinary measures are taken to meet the difficulty

The Committee can only suggest that at the beginning the necessary funds will have to be raised by voluntary contributions from the members, these to be given outright or in the form of a loan If the latter, a slight emergency assessment on the increased membership would soon make up the amount The right man will in most instances make his salary from the dues of new members

The time necessary to complete an organization in detail, as will be suggested under "County Societies," will depend on the man and on the number of physicians in a state In most states a year will be necessary, in a few less time, and in others two years The secretary of the state society, other things being equal, would be the man for the work When the work is completed, a paid secretary must keep it up Continuous personal work, but to a less extent, will be required If a society becomes dormant, the reason should be ascertained, and if a member drops out, it should be known why Personal jealousies, resulting in petty quarrels, can nearly always be inquired into with good results by the right man from another neighborhood and a better feeling will result among all concerned All this takes money, but it will pay

THE COUNTY SOCIETIES

It will be conceded by all who have given earnest thought to the subject that until a medical society exists in every county in the country, organization will have fallen far short of its opportunities for usefulness and of the real purpose of its existence Such societies would furnish to every physician the opportunity of membership with the professional, social and material stimulus and betterment incident thereto Such consumation is worthy of our most consistent and persistent efforts as individuals and as a profession, but it is left to this generation of medical men, or to some future one if we are not equal to the duty To accomplish it will require some uniform plan, so broad in its conception and so perfect in its details that in time it can be made to reach and influence the rank and file of the profession, and especially that large class which owing mainly to a faulty system, at present seems to be separated from progressive medicine

In such a plan, that part which relates to the organization and maintenance of county societies or an aggregation of counties in some sparsely settled districts, will be at once the most important and the most difficult For obvious reasons it has always been easy enough to have leading men attend and keep up the interest in the state societies and in the ASSOCIATION, but the difficulties are greatly increased when we come to face the problem of making the frequent meetings of local organizations sufficiently harmonious and interesting to maintain the requisite attendance month after month and year after year Yet this is done with most excellent results in a few states and in a few counties in all the states, and it is possible everywhere The difficulties are on the surface and should be frankly considered

EXISTING CONDITIONS AND THE YOUNG PRACTITIONER

Outside of certain states and sections the condition of the average physician in this country is neither an enviable nor an inspiring one, and this is as true of a large element of those living outside of the organizations in the cities as of those in the towns and country districts Consider the influence these conditions exert on the recent graduate make the application general and we fairly epitomize the evil which is as widely prevalent as it is discouraging As a rule the young graduate has left his alma mater none too well trained for his high calling but ambitious to learn and craving for fellowship and the knowledge which comes from experience His location chosen, he is fortunate if he is not met at the threshold, the most impressionable period of his medical life, with ill-concealed sneers or complete ostracism by those already established in practice, which will grow with his success, or soon entirely disappear if he is a failure With time he is likely to find that many of his professional neighbors practically laid down their books at graduation, that they receive no journals except the free-copy advertising periodicals that they have little or no equipment for even the emergency surgery that they must do and that so much of their time is taken up with petty professional bickerings as to destroy all desire for advancement Although physicians need advice and help from one another as no other men do the young doctor often finds that where there are but two doctors in a community this spirit of envy and contention, pitched upon the lowest possible plane, so divides them and so infects the community as to be utterly destructive of that public respect and confidence to which both are perhaps equally entitled He will find that they quarrel about patients who would not pay either of them if they could, or about provisions of the Code which neither of them have read that one is afraid to collect his just fees for fear the other will get some of his offended patrons, that ambition for excellence in surgery or other special work is hindered by the fact that one will send for consultation or send his patients to a distant town or city rather than ask the assistance of his neighbor, in a word that this curse which clings to our profession with such tenacity and blights all to which it clings bars all advancement and destroys his ideals of life With such environment the horizon of the graduate probably never large but certainly susceptible of enlargement, grows smaller and smaller with the years until he drops out of the race and is likely to become the unkempt and self-satisfied medical degenerate only too frequently to be found without search

It is mainly this condition which causes so much poverty in the profession, interfering with it in every business aspect, just as the loss of public respect and confidence directly traceable to it accounts for most of our difficulties in securing needed medical and health legislation, and in the enforcement of such laws as have been enacted The picture here presented is not a pleasant one, but the Committee believing that these glaring evils are the results of faults in our system which are remediable, paints what it finds in the hope that future workers in the same field may be able to find what it would like to paint

THE REMEDY FOR THE ABOVE CONDITIONS

The only remedy for these evils is a systematic all-pervasive organization, beginning with the county society as the broad foundation, and extending through the state societies to the AMERICAN MEDICAL ASSOCIATION, conferring, so far as may be possible equal privileges and blessings on the members in New York and Chicago and on those located in the remote hamlets of Maine and California With such organization all things reasonably desired become possible to us, and through us to the people, for whom, as regards all protective sanitary and medical legislation our profession must think and labor What the Committee suggests will require time, much patient effort and no little expense

ORGANIZATION OF COUNTY SOCIETIES

County Medical Societies—"It requires but a moment of reflection to perceive that a state society composed of delegates chosen annually by the professional organization of each county or district, could not fail to represent correctly the social, scientific, and legal interests of the profession of that state, and that a national society composed of delegates similarly chosen annually by each of the state societies would be equally the true representative of all the interests of the profession of the nation It is equally apparent that such a complete national professional organization would offer the greatest possible facilities for collecting and concentrating the influence of the profession for any great or important object, whether relating to the educational and scientific advancement of the profession itself, or the promotion of the sanitary interests of the whole people, and equally efficient for radiating the spirit of investigating, mutual respect, and generous emulation developed by the annual contact of the most active and enlightened minds in the national meetings, back through the state organizations to the remotest county and parish in our great republic It is hardly necessary to remind our readers that a representative national organization capable of efficient work in the various directions here indicated has for its foundation the primary organizations in each county or district On the degree to which these can be made to include every active and intelligent regular member of the profession and the activity with which their regular meetings are sustained,

will depend, in a very great degree, both the permanency and value of the state and national associations It is here, in the incompleteness of the primary local organization of the profession in many parts of our country, that we trace nearly all the important defects in the practical working of our present state and national associations" (Editorial, JOURNAL AMERICAN MEDICAL ASSOCIATION, Jan 15 1887)

It is through the local society that the individual must be reached, and that the individual effort of the profession for political purposes must be made It is through the county society that the individual must register his views in regard to questions and measures which affect him[9] The local society produces harmony, promotes good fellowship, removes petty jealousies, has an elevating influence on its members, and aids them in educational and scientific advancement

On the success of the county organization depends all above it, it is the foundation of the whole superstructure The old motto, "Take care of the pence and the pounds will take care of themselves," is true if paraphrased into, "Take care of the county organizations and the state and national bodies will take care of themselves" Hence, everything that will tend to build up these local societies should be encouraged

HOW TO ENCOURAGE MEMBERSHIP IN COUNTY SOCIETIES

How can this be done? The first proposition, and the most important of all, is that no one shall be allowed to belong to any higher society until he is a member and supporter of his own county society, and this membership in the lower must be continued This is one reason why the state societies are asked to adopt this as their first principle in organization It should be made impossible for one to get into the higher body unless he is a member of the lower one This principle is recognized in all organizations, secret orders, churches, etc If the various special district and seminational bodies will adopt the same principle, then there will be no doubt as to successful organization of the county societies in the future

As the organization of county societies depends on the state society, the first and most difficult problem is how to arouse these to a realization of their responsibilities in the premises It is feared that some of these bodies may resent any suggestion from the outside no matter what the motive that prompts the suggestion This difficulty overcome, the rest will be comparatively easy The adoption of a modified plan by which secret insurance orders, trades unions, and similar bodies are built up, as previously suggested, will be necessary This means a paid organizer While the right man for this work may not easily be found, a little effort will find one He need not necessarily be a physician, although it is best that he should be It would be well if he were the secretary of the state society, as then he would not only get in close personal touch with the individual members of the profession of the state, but this close relationship would be continuous through his office after the organization is completed

SYSTEM OF BLANKS AND BOOKS NEEDED

Preliminary to any attempt at organization a system of books and blanks should be adopted This should be done by a small committee representing all the states These could be printed and supplied by the National Association at a nominal cost, the work being done by THE JOURNAL plant The county books and blanks should be devised for recording the name, address, qualifications, etc, of every physician in the county legally entitled to practice, with special designation for those who are members of the recognized society The blanks should be gotten up for the purpose of conveying by the secretary of the county society this information, but in less detail, to the secretary of the state society, who would have a book arranged for recording it annually The county secretary will report to the state, the removals, the accretions the additions, deaths or withdrawals from the society, whence they came and, when possible, where they go, this information to include also all legally qualified physicians who are not eligible to membership[10]

9 By making membership in a local society a necessary qualification for membership in the state and national societies, the strongest possible inducement is presented for organizing and maintaining these primary and essential bodies by all intelligent members of the profession By providing for delegates from the local and state societies on a uniform ratio of representation, and placing the whole business management of the Association in the hands of such delegates by restricting to them the right of voting the most reliable check is put upon the tendency to centralization or local control, or any form of class supremacy, while the door to permanent membership is opened to all who are willing to support the interests of the profession in their own districts" (Report of Committee on Organization 1887, JOURNAL AMERICAN MEDICAL ASSOCIATION, June 25, 1887)

10 The question may be asked, why go to the trouble of registering all licensed physicians including those who may not be considered eligible to membership in the society? A system of registration as above outlined gives the organization information of all who are legally practicing medicine and their qualifications It puts a label on each one When all the states are organized, it will be a simple matter to follow each individual, no matter how often he may change his location By a system of cards, members will be transferred from one county society to another without expense or trouble Those who are anxious to be classed as reputable will not object or hesitate to transfer their membership when relocating Others for reasons will not co operate, but rather resist such registering of information regarding themselves In such cases the information desired may be difficult to obtain, but it can and must be had no matter at what cost Thus the record of each will be known no matter where he may be When a little thought is given to this proposition, it will not be found to be as difficult as at first might be supposed The local registration of physicians, as provided by law in most of the states will be a great assistance in keeping up such a system A 'card index' system of identification of the legal practitioners of the United States is practical, of easy accomplishment, and will do more to put down quackery and expose pretenses than anything else that can be done It gives an answer to the questions, "Who is he?" Where is he from? 'What are his qualifications?" "What is his reputation?"

Another thing greatly needed is a reliable physicians directory or register Business houses are publishing what are called medical directories but without exception all are unreliable The best of them contain the names of pretenders patent medicine vendors horse doctors et id genus omne The qualifications may be given correctly if the necessary information can be gotten easily, otherwise not The profession in this, as in many other ways, is used by commercial houses as a means for money making and if there is money in publishing a directory and there most certainly is the profession should have it and at the same time control it The profession in Great Britain to a great extent at least controls the Medical Register We should control it here With such a system of registration as recommended all information necessary for issuing a directory will always be ready without extra expense It will insure a reliable book and one that will mean something It will not be necessary to go outside of the profession for anything The printing establishment now owned by the AMERICAN MEDICAL ASSOCIATION, with a little addition, can get out the book State directories can be printed and the same material without any change, can be used in making the national directory There will be no duplication of work The national directories can be issued bi or triennially, and a supplement annually and also the state when called for, separately and annually The matter when once set up can be left standing and corrections made as necessary The Committee believes that the publication of an official reliable directory is worthy of earnest consideration on the part of every physician The registration of all licensed physicians by the profession itself, as advised will make it possible to tell how many

The task allotted to the state organizer is 1, to secure the name, address, and medical history of every physician in the county, 2, to organize a regular society, unless one already exists, 3 to use every effort, including personal solicitation when necessary, to get all reputable regular physicians to affiliate themselves with the society

Two difficulties should be considered, both as to the primary organizing and as to keeping up the detailed information required one of these pertains to the large cities those in which there are say more than 200 physicians, the other to the thinly-populated parts of the country In both instances the difficulties will be found more imaginary than real In the large cities the trades unions keep in direct touch with each of the members of their calling Political parties know the name of every voter and his party affiliation, if he has any and also if not that is known These do it by subdivision of territory We must do the same The large city must be subdivided into wards or precincts, with a ward or precinct secretary, if necessary, whose duty will be to keep the secretary of the county society informed of newcomers etc The organizer will be able to cover a large city, as well as a small one, but it will take longer time

In thinly-settled territory it will be impossible to do the personal work, but with correspondence and the aid of physicians in the territory in sympathy with the work, exact data of every physician can be had It must not be forgotten that a practicing physician is a well-known personage in the thinly-settled places, and none will be so obscurely situated as to be omitted In the crowded portions of our largest cities, the sign of the doctor will prevent his remaining out of the record Many of these will not readily connect themselves with societies at first, but when they realize that they are not forgotten by their fellows, and that advantages are to be had at small cost to themselves, they will not continue in their isolation

Membership in a county society must be a right that can be demanded by every reputable regular physician and if this right is refused on account of local feeling, then recourse should be had to a higher body, and if on trial it can be shown that the applicant is worthy of membership, it should be accorded him

Each state society must insist (1) that there must be a society in every county where there are ten regular physicians, (2) that physicians must belong to their own county society, (an exception should be made where one lives much nearer to the place of meeting of an adjoining county society than to his own In such cases his own society should have the privilege of granting him the right to associate with the other), (3) that where the population is scattered and physicians few two or more counties may unite and form a district society

Some of the recommendations in this report are not applicable to certain thinly-settled parts of our country For instance, Arizona has only about 125 regular physicians, with about 62 members of the state society Idaho has probably 190 regular physicians in the Territory and only about 48 are members of the state society. Montana has probably 275 regular physicians and probably 90 are members of the state society Nevada has probably 55 regular physicians and about 25 are members of the state society New Mexico has probably 130 regular physicians and about 30 are members of the state society North Dakota has probably 275 regular physicians and about 125 are members of the state society Utah has probably 275 regular physicians and about 84 are members of the state society Wyoming has less than 100 regular physicians and about 33 are members of the state society It will, of course, be impossible to organize county societies in much of this territory, but the information for a complete enrollment of the whole profession of this country can be had in this territory with very little expense on the part of the representative bodies in them These should be asked to co-operate to make our plan complete, although they should not be asked to go into the details as suggested, neither is it possible for them to do so There may be other states not mentioned in which the same difficulty will arise The Committee only suggests the above where it is applicable

In conclusion, the Committee believes that the recommendations above made are in no way Utopian or impractical, but that they are such as can be carried out in every part of our great country and that they will result in a scientific, social, and material benefit to the individual and to the profession as a whole, as well as to the well-being of the people

physicians there are in any county or state or in the country At present we guess about 120 000 in the latter it may be 10 000 more or 10 000 less for there is no reliable information on the matter In such a directory reliable information should be published in regard to medical colleges hospitals etc. in each state those not recognized being kept out of such a record but liberal construction must be placed on these as it relates to sectarian colleges etc

Original Articles.

THE PATHOLOGY OF ACTIVE TUBERCULOSIS OF THE PERICARDIUM

H GIDEON WELLS, M D
Fellow and Assistant in Pathology Rush Medical College
CHICAGO

A number of cases of tuberculosis of the pericardium having been observed in the autopsies studied in the pathological laboratory of Rush Medical College, during the past six years at the suggesion of Professor Hektoen I have collected the reports and specimens for study, including among them the cases observed at autopsy at the Cook County Hospital during the past 3½ years Altogether the material has been drawn from 1048 autopsies on the bodies of adults Tuberculosis may produce in the pericardium distinctly tuberculous processes with miliary tubercles or caseous masses, which may be shown by microscopic and bacteriologic investigation to be positively tuberculous, again it produces simply a fibroplastic process in which the adhesions and the pericardial membranes contain no anatomical evidences of tuberculosis This latter form is often difficult to distinguish from any fibrous pericardial synechia of other origin, and will not come into consideration in this paper which will deal only with cases in which the anatomical evidences leave no question that the process is tuberculous Of such cases there are ten among the 1048 autopsies, two cases of tuberculosis of the pericardium of the dog have also

been studied and reported from Professor Hektoen's laboratory, and these will be considered in comparison with human tuberculosis The anatomical reports of the cases are as follows

CASE 1 —A colored man, 29 years old presented during life the complete picture of pericarditis with effusion, and from which he died through heart failure despite repeated aspirations At autopsy the origin of the trouble was found to be tuberculosis, which fact had not been ascertained during life, repeated microscopic examinations of the aspirated fluid always having failed to show tubercle bacilli All the intrathoracic and intra abdominal lymph glands were tuberculous those of the interior mediastinum being firmly imbedded in the pericardial adhesions In the lungs there was no tuberculosis except possibly its remains as a scar in the right apex Both pleural cavities were completely obliterated by fibrous adhesions and in the right pleura were many firm miliary tubercles The external surface of the pericardium was firmly adherent to the lungs on both sides more on the right than on the left Between the upper part of the pericardium and the pleura were imbedded many caseous and anthracotic glands On opening the sac it was found enormously distended with a clear dark straw colored exudate and lined with a layer of fibrin which covered a thick layer of newly formed connective tissue Over the base of the heart especially over the right auricle the layers were adherent The parietal layer was greatly thickened and scattered over its external surface were numerous whitish and greyish tubercles, they were especially numerous over the right auricle where the layers were adherent, they could also be felt between the parietal layer and the diaphragm at the line of their attachment The heart was much hypertrophied, its weight 700 grams without valvular, arterial or renal lesions to account for it both ventricles were considerably dilated Inoculation of the pericardial fluid on ordinary media resulted in no growth but a guinea pig which received an intraperitoneal injection of the fluid developed tuberculosis Histologically the ordinary changes of tuberculosis were found This case occurred in the service of Dr Frank Billings who will consider the clinical features at greater length

CASE 2 —A man, 49 years of age was found dead and nothing known of his previous history The pericardium was distended with a large quantity of bloody serous fluid about 1½ pints altogether Both layers were covered with a shaggy fibrinous layer which in the posterior part bound the opposed surfaces firmly to each other Both lungs were extensively involved by a tuberculous process and the pleuræ were everywhere firmly united by fibrous bands Over the pericardium the lung was firmly adherent, and in the wall of the pericardium and of the pleura were numerous yellowish nodules, the largest on the pleural surface The peribronchial lymph glands were caseous and calcareous An old right coxitis, tuberculous, was present Unfortunately the size of the heart is not mentioned in this report, but it is stated that the liver was the seat of a marked passive congestion

CASE 3 —A male, 30 years old, died from general miliary tuberculosis The pericardium was firmly adherent to the chest wall, lying on its anterior surface and firmly adherent to it, was a caseous nodule the size of a hickory nut The internal surface of the visceral pericardium was rough and granular and the cavity contained a large amount of bloody fluid The surface of the heart was entirely covered by a shaggy fibrinous layer Enlargement of the peribronchial, mediastinal and mesenteric glands was marked There were numerous tuberculous ulcers of the intestine, and a plastic tuberculous peritonitis Miliary tubercles were abundant throughout the viscera, and the lungs showed, in addition to the recent crop many old fibrous tubercles, but there were no active caseating or ulcerated areas Firm fibrous adhesions obliterated both pleural cavities The heart itself was not affected in any way In this case, therefore, the oldest active process and the presumable source of the miliary lesions, was either in the enlarged glands or the intestinal ulcerations, the oldest process found was the healed miliary tuberculosis of the lungs

CASE 4 —This was a man 38 years old in whom the chief findings during life were those of a right sided serofibrinous pleuritis This was found at autopsy, on the left side, in addition to a general fibrous synechia, was found a small area of purulent and caseous matter lying directly upon the pericardium The pericardium itself at this point, that is, the parietal layer, was thickened and contained many yellowish broken down caseous areas, the sac contained a small amount of turbid, bloody fluid, and directly beneath the caseous portions the pericardium had lost its glistening aspect Otherwise there were no changes in the sac There was a general tuberculosis of the lungs and abdominal viscera

CASE 5 —A colored man, 21 years of age, died from generalized tuberculosis Both layers of the pericardium were found obliterated by firm adhesions, no spaces being left anywhere At the line of union of the surfaces the connective tissue was bluish and in this tissue were scattered numerous greyish areas of varying size, but all small In every organ were found tubercles, one near the lower end of the spinal cord having produced during life the symptoms of a conus lesion The pleuræ were also the seat of fibrous adhesions and miliary tubercles the peribronchial glands were enlarged caseous and calcareous Old and recent caseous foci, with some cavities were present in the lungs On section the increase in fibrous tissue was found not to involve the myocardium and the tubercles were all between the pericardial layers Smears from the tubercles in different parts of the body showed tubercle bacilli Those in the pericardium were not specially examined The size of the heart and of its cavities was not affected and there was no interference with the circulation

CASE 6 —A man 70 years of age, died with signs and symptoms indicating dilatation and incompetence of the left heart which condition was attributed to a chronic interstitial nephritis and the accompanying arteriosclerosis and fibrous myocarditis These conditions were all found as diagnosed but in addition the pericardial sac was found completely obliterated by firm fibrous adhesions Externally the pericardium was firmly adherent to the lungs and to the diaphragm, beneath the pleura on the right side were many pin point whitish nodules In addition to the dilatation of the heart and the fibrous myocarditis there was considerable hypertrophy, chiefly of the left but somewhat of the right ventricle, the total weight of the opened heart being 575 grams Adhesions similar to those in the pericardium obliterated both pleural cavities, and on the right side firm miliary nodules were numerous A large puckering scar in the left apex with a few small fibrous nodules beneath it perhaps indicated the source of the caseous masses which enlarged the peribronchial lymph glands A considerable degree of passive congestion of the liver was the only evidence of cardiac incompetence

CASE 7 —A male, aged 50 years died with evidences of a basilar meningitis The pericardial cavity was found obliterated by fibrous adhesions, when the layers of the heart were separated the surface of the heart was found studded with small firm, yellowish bodies which were very numerous No hypertrophy of the heart existed, the weight being but grams but the ventricular cavities were noticeably dilated and the myocardium showed marked fatty changes Both lungs showed advanced tuberculosis with cavity formation, miliary tubercles were present in the spleen and kidneys and there was also a tuberculous leptomeningitis Both pleural cavities were obliterated by firm fibrous adhesions

CASE 8 —A male 61 years of age died of chronic nephritis with uremic manifestations On removing the sternum both lungs were seen to adhere to the pericardium to the extent that they overlayed it and they were firmly adherent to parts of the chest wall elsewhere except where separated by a recent serofibrinous exudate The cavity of the pericardium was entirely obliterated chiefly by fibrous tissue and where this was lacking by thick caseous material which in places invaded the heart walls The right auricle was in one place invaded by such a caseous mass, and this, where in contact with the blood was capped by fibrin forming a rounded, oblong thrombus No tuberculosis, either recent or old could be found in the lungs The peribronchial and mesenteric glands were enlarged and caseous those about the pericardium were imbedded in fibrous

adhesions which firmly united them to its external surface In the right lung was a hemorrhagic infarct of recent origin A smear from the caseous material in the pericardium did not show tubercle bacilli, but a guinea pig inoculated with a portion of it developed tuberculosis Histologically the usual features of a caseous and miliary tuberculosis were found, except that giant cells were not seen in the sections examined

Case 9—This was the body of an unknown colored man, aged 23 years examined by the coroner's physician, Dr L J Mitchell and nothing could be learned about the conditions existing before death The heart with its adherent pericardium weighed 625 grams The pericardial cavity was found obliterated completely, for the most part by firm fibrous tissue in which were spaces filled with caseous material, especially along the line of cleavage of the two layers On the external surface of the parietal pericardium were many nodules, the largest the size of small peas In some areas the interpericardial caseous masses extended into the myocardium, especially over the auricles The adjacent peribronchial lymph glands were converted into large caseous masses Nowhere else in the body could other caseous foci be found On microscopic examination caseation, round and epithelioid cells were found but no giant cells tubercle bacilli were also found, although not numerous This specimen was exhibited to the Chicago Pathological Society by Dr D D Bishop, Jan 13, 1896

Case 10—A man, 35 years of age, died with a general miliary tuberculosis of the large serous cavities The oldest of these tuberculous processes was apparently that in the pericardium, this was like Case 9, obliterated by firm fibrous adhesions, with the caseous masses numerous along the line of union of the two layers Miliary tubercles were also present in the pleural and peritoneal cavities with extensive organized exudate More miliary tubercles were found in the liver Caseous peribronchial glands were present and seemed to be the source of the pericardial infection Histologically the usual features of a caseous process were found and tubercle bacilli were demonstrated

In 1893 Osler[1] reported 17 cases of tuberculous pericarditis and in a characteristically compact and complete article discussed the subject It can not be said that the progress of time permits much to be added to what Osler reported The subject has been well covered prior to Osler's report, by Hayem and Tissier[2] in 1889, and synchronous with Osler, Jaccoud,[3] in a clinical lecture, has given a most interesting discussion Since that time no extensive consideration seems to have been given in the available literature The general opinion seems still to be, despite the above papers and the very numerous reports of individual cases, that tuberculous pericarditis is a rare lesion, which is indeed contrary to fact, occurring in nearly 1 per cent of our autopsies and these figures are not far different from those of other institutions Osler states that in 1000 autopsies the majority of which were made at the Montreal General Hospital, there were 7 cases In our 1048 autopsies 364 presented distinct tuberculous lesions elsewhere than in the pericardium of which 208 were active Of these 26 were instances of acute miliary tuberculosis, in 2 of which the pericardium was involved 58 presented more chronic lesions in many parts of the body, generalized caseous and ulcerative tuberculosis with 2 cases of pericarditis The remaining cases of pericarditis owed their origin to more direct extension, which will be discussed fully later In all the bodies with active tuberculosis therefore about 5 per cent presented active tuberculous lesions in the pericardium

Evidently tuberculous pericarditis is far from a rarity In relation to other pericardial lesions it comprises a considerable proportion Among the entire number of autopsies the pericardium was found affected in some way in 128 This includes everything in the nature of a pericarditis, from the simple apical adhesions up, of these the 10 cases of tuberculous pericarditis form nearly 8 per cent, 51 of the 128 were healed processes, represented by various degrees of adhesion by simple fibrous tissue Of the remaining 77 in which the process was still active, although in many cases very slight, including even those instances of pericarditis in which the lesion consists of simply a small area of fibrinous exudation, the 10 cases of tuberculosis form 17 per cent Breitung,[4] among the records of the Charite in Berlin from 1866 to 1876 found 419 affections of the pericardium of which 45 were considered tuberculous, nearly 11 per cent Osler states that "tuberculosis follows hard upon rheumatic fever as a cause of pericarditis" This applies only to the chronic forms, however Of course rheumatic pericarditis rarely comes to autopsy in the acute stage—one of the above cases—and not frequently in proportion to its actual occurrence in the later stages—8 cases among the 55 instances of healed processes. But tuberculous pericarditis, which when acute is very likely to reach the autopsy table is found here to be much less frequent than the pericarditis following pneumonia, which has a similar prospect of autopsy and occurred in 28

It is very likely to occur in the young, and many cases have been reported even in infants (Sequira,[5] Duckworth,[6] Rolleston,[7] Baginsky[8]) Baginsky found that in 4500 autopsies on infants pericarditis occurred 66 times, 20 of them being in the first year Of these 24 accompanied polyarthritis, tuberculosis coming next with 15 cases, of which 4 were purulent H McC Johnson[9] has reported a case in which the tuberculosis seemed probably of antenatal origin This was a child who died at the age of 3 months The mother had been sick with tuberculous cystitis, bacilli being found in the urine The placenta was adherent and contained inflammatory masses which were structurally like miliary tubercles although tubercle bacilli were not found in the sections The child died of pulmonary hemorrhage and in addition to obliteration the pericardium was adherent to the lungs, which contained cavities The mesenteric glands were enlarged

ANATOMY

The forms of tuberculosis seen in the pericardium differ not at all from those seen elsewhere It may produce an acute miliary eruption on the pericardium, generally on the parietal layer with an extravasation of serous or bloody fluid mixed with fibrin, as seen in Cases 1, 2, and 3, again it is miliary, but of a more chronic type accompanied not by effusion but by fibrous synechia as in Cases 5 6 and 7, caseous masses are also found, as represented by Cases 8, 9, and 10 Sometimes the pericardial wall is involved by the tuberculous process, extending from without and producing an acute inflammation without tuberculous lesions properly in the pericardium is in Case 4, such a case is hardly one of tuberculous pericarditis from the anatomical standpoint although the pericardial inflammation is due to the tuberculous toxin and would undoubtedly present characteristic lesion in course of time had death not stopped its progress Acute pericarditis that is not tuberculous may also occur in tuberculosis as Osler has stated It may be the result of an acute non-tuberculous pleurisy more often it is a terminal phenomenon in chronic tuberculosis, when it is one of the manifestations of terminal bacteremia This was the explanation of three cases of acute pericardial inflammation in our series in all the changes

consisting only of a small amount of turbid fluid with a few patches of fibrinous exudate on otherwise normal pericardial surfaces

Healed tuberculosis of the pericardium is not under discussion in this paper, but it may be stated that it often exists and is then represented simply by firm fibrous adhesions Calcification of the caseous material may possibly occur, but this seems to be extremely rare In the literature of this subject it is impossible to find a case in which there is sufficient evidence to state positively that the calcification occurred in tuberculous lesions In fact tuberculosis in the lungs, glands, or elsewhere is somewhat rare in cases with calcified pericardium Fritz Diemer[10] has collected 12 cases of extensive calcification of the pericardium in only one of which were any tuberculous lesions found in the body and here but a few nodules in the lungs C Bacaloglue[11] has reported a case of calcified pericardial exudate in an individual with caseous infiltration in the pulmonary parenchyma, but establishes no relation between these two conditions Four examples of calcification of the pericardium were observed in the autopsies under discussion, and in none of them did any tuberculosis coexist It is more probable that calcification is a sequel of inspissation of purulent exudates, most often of pneumococcus origin However, it is not to be denied that it is possible for caseous pericarditis to heal and become calcified Puschmann[12] has reported a case in which caseous tuberculosis of the myocardium itself became partly calcified In other words, tuberculosis assumes the same forms in the pericardium as elsewhere Even the fibroplastic, "perl-sucht" form has been observed in man, Meltzer[13] has reported such a case, encountered unexpectedly in an insane patient Rolleston[7] has reported an interesting case occurring in an infant 9 months old, in which the parietal pericardium alone was affected but thickened diffusely to such an extent that it retained its shape and did not collapse when separated from the heart The two cases of canine pericardial tuberculosis reported from our laboratory were marked by the large size and fibrous nature of the nodules In Sheldon's[14] case the pericardial sac was distended with fluid and both layers of the pericardium were covered with yellow and grey nodules In Professor Hektoen's[15] case the layers were adherent and the nodules, firm and fleshy, were from 0 5 to 2 5 cm in diameter invading the muscle for some distance

According to most writers the fibrous type with small tubercles, often only microscopic, is the most common Osler, however, found in 15 cases, 9 accompanied by exudation The exudation, when present may be simply serofibrinous, as in Case 1, but is more often decidedly hemorrhagic, as in Cases 2 and 3 Tuberculous pericarditis is notoriously hemorrhagic, sharing this with carcinoma, but Sears[16] calls attention to the fact that other diseases may lead to a similar condition From the literature he has collected 11 cases which recovered after aspiration had yielded a hemorrhagic fluid, and questions somewhat Osler's statement that the presence of a bloody fluid on aspiration is decidedly in favor of tuberculosis But as six of Sears's cases occurred in scurvy and 3 in rheumatism the obtaining of a bloody fluid would hardly have caused any question of tuberculosis in the diagnosis In this fluid tubercle bacilli may be found occasionally In Case 1 this was accomplished by inoculation of a guinea-pig, although repeated microscopic examination of the fluid removed by aspiration during life failed to reveal them Considering the acute nature that exudative tuberculous pericarditis often assumes they should be found at least as often here as in the tuberculous pleuritis Eichhorst[17] has demonstrated them in 8 of 27 cases of pericarditis arising spontaneously by inoculating guinea-pigs with 15 c c of the fluid

The fibrous forms present no special features As a rule the adhesions are of a peculiar, translucent, greyish-blue if young, white and hard if older, but either of these appearances may be presented by other forms of pericarditis The tubercles may exist in the exudate itself or in the walls of the pericardium Sometimes they are limited to one wall, in which case it is most often the external wall that is affected, and it is often accompanied by a crop of tubercles on the pleura opposite If caseous, the caseous material is most often found separating the pericardial layers by some little distance, and is especially found surrounding the base of the heart over the auricles and about the great vessels If the adhesions are soft and easily separated they are generally found to be firmest over the base of the heart Occasionally the adhesion is but partial, and accumulations of fluid are found, isolated by the fibrous tissue, but this is infrequent in tuberculosis, more common in the rheumatic When the exudate is serous, however, it is quite frequently found that the layers over the auricles and the great vessels are adherent (see Case 1)

The myocardium may be involved either secondarily or primarily, of which the former is the more common In miliary tuberculosis they may occur simultaneously Secondary involvement of the myocardium in the miliary form is of little importance, as it extends but little into the heart The caseous masses however, may extend far into the heart muscle and produce considerable effects Penetration of the ventricles is usually of less significance than penetration of the auricles, whose thinner walls render complete perforation possible and by no means rare, as in Case 8 in which the caseous mass entering the auricle was capped by a thrombus In Case 9 the myocardium was invaded to a less extent especially over the auricles The results of this myocardial invasion will be considered later on

ETIOLOGY

While Virchow and some others have reported in time past a primary tuberculosis of the pericardium, with our present understanding of the process it is difficult to imagine such a thing The pericardium, being a completely closed sac, must receive the tubercle bacilli from some other source which is probably the seat of some lesion, however insignificant Since the tuberculous nature of pleural scars and calcified glands has been known primary tuberculosis of the pericardium has not been reported The possible methods of infection of the pericardium are as follows

1 Hematogenous generally in the course of a miliary tuberculosis

2 Lymphogenous the bacilli coming through the lymph vessels either in the normal direction or with a reversed current

3 Extension in about the order of frequency, from mediastinal glands pleura, myocardium, vertebræ

Hematogenous tuberculosis of the pericardium is very frequent, but this localization is nevertheless the least common of any of the large serous surfaces, including the meninges It occurred in but 3 of 84 cases of general miliary or coarser tuberculosis The resulting lesions are generally acute, and may be of the ex-

udative form as in Case 3, or fibroplastic as in Cases 5 and 7 As a rule the process in the pericardium is hidden during life by the severe symptoms from the other sources, and is rarely diagnosed While the isolated caseous form may be of vascular origin this must be extremely rare, for the pericardium is by no means a seat of predeliction for circulating bacilli It is quite remarkable how rarely the pericardium is infected in animals inoculated experimentally In some 30 guinea-pigs recently inoculated in our laboratory, in which the pericardium has been examined with especial care, it has never been found affected, this despite the fact that the lungs the pleura and the glands of the mediastinum were always involved

Infection of the pericardium from the lymph stream is much more common It may be due to passage of the bacilli from a tuberculous pleura or peritoneum via the anastomosing lymph channels of these sacs, and form a part of a general tuberculous serositis However, it would seem that it is much more often a matter of passage of bacilli from the lymph glands of the mediastinum to the pericardium This implies a reversal of the normal direction of flow, which v Recklinghausen[18] has shown occurs, and which has been observed not infrequently in the dissemination of malignant tumors, as by Witte[19] The obstruction of the spaces in the lymph glands by the tuberculous proliferation would favor, and undoubtedly often produce, such a reversed flow, so that the discharged lymph carrying in it tubercle bacilli, would pass into the pericardial lymph channels As to the source of infection of the glands it must be remembered that the cardiac glands—also called the superior mediastinal—lying on the base of the pericardium, and the posterior mediastinal glands, which together receive most of the lymphatics from the pericardium, both receive branches from the bronchial nodes which receive the lymph from the lungs and pleura The cardiac glands also communicate directly with the deep cervical nodes (Gerrish[20]) From either of these communications, therefore, the glands draining the pericardium, and in turn the pericardium itself are able to become infected Testut[21] describes the distribution of the lymphatics within the pericardium as follows The lymphatics form a network in the connective tissue layer of the serosa, as much under the visceral as under the parietal, a network more or less rich, which lies nearer the endothelium than does the network of blood-vessels The fibrous sac possesses also some lymphatics which belong to it alone These all empty, like the lymphatics of the heart, into the subpericardial network, and from there to the ganglia which are located below the bifurcation of the trachea[11] On account of the free anastomosis which exists between the lymphatics of each side of the diaphragm, a tuberculosis of the peritoneum occasionally seems to extend to the pleura and involve it, less often it reaches the pericardium in this way Vierordt[22] while writing on general tuberculosis of the serous membranes mentions that in 24 cases of tuberculosis of the several serous cavities combined, the pericardium was involved four times and in none of these from the peritoneum, it seemed to originate always from the pleura, especially the left Writing at that time 1888 he says "For the occasional occurrence of simultaneous processes in the pericardium is the same transference (as from pleura to peritoneum) assumed although not exactly demonstrated It seems now that tuberculosis passes from the pleura to the pericardium often by the indirect route via the mediastinal glands or by direct extension through the pleuro-pericardial wall Occasionally the larger sacs owe their tuberculosis to the pericardium, as seen in Case 10 Here the neighboring peribronchial glands seem to have given rise to a caseous pericarditis, which in turn led to infection of the pleura and peritoneum, both of which were more recent than that in the pericardium

Direct extension of the tuberculous process from the glands lying on the outer surface of the pericardium has been assumed by many writers, but seldom demonstrated Kast[23] and Mickle[24] have observed direct rupture of caseous peribronchial glands into the pericardial sac, but no other instances of such extension have been mentioned by other writers Because of the close relation of the glands to the pericardium, often with adhesion, the direct extension has been assumed Yet it is difficult to establish such an extension In two cases in which the glands were evidently the source of the pericardial tuberculosis I have made a careful examination of the relationship of the glands to the pericardium by examining microscopically the tissues intervening Nowhere could any evidences of direct extension of tuberculosis from a tuberculous gland to the pericardium be found, always the intervening fibrous tissue, although evidently new-formed, was free from tuberculous lesions, which seemed never to extend through the gland capsule Hence it seems probable that the infection of the pericardium is more often via the lymphatics than directly, even when the glands and the pericardium are united by fibrous adhesions Tuberculosis of lymphatic origin is generally most marked on the parietal pericardium, that of hematogenous origin affects most often the epicardium Of the glands that are most likely to be the source of a direct extension it would seem, after reading reports of many cases, that the small glands lying anterior to the pericardium, behind the sternum, are the most important Attention was first called to this source by Weigert[25]

Very frequently it is found that the pericardium and the mediastinal glands exist together as the only active tuberculosis in the body If the pericardium is tuberculous the glands become so even if not the primary seat This glandular and pericardial tuberculosis exists together, with or without pleural tuberculosis, independent of active pulmonary lesions, in a strikingly large proportion of the cases Simmons[26] has called attention to the occurrence of this condition in the aged In our series it existed in Cases 1, 6, 8 and 9 In Case 10 the lungs were free, but the process had become quite widely spread, apparently the glands infecting the pericardium and the tuberculosis becoming active here had then become widespread It would seem that the pericardium is most likely to be infected when the glandular process is chronic in character, for when they are actively affected, as accompanying pulmonary tuberculosis the pericardium seems to be seldom tuberculous

From the pleura direct extension may occur, as well as by the lymphatics The very earliest stage of this transmission is well shown by Case 4, in which a small caseous abscess lying between the left pleura and pericardium had caused an acute inflammation in the serous surface of the pericardium directly beneath, after causing caseation of its outer layers Here effusion into the sac had only just begun Case 2 is also probably an example of direct extension However, it is probable that direct extension from the pleura as from the lymph glands is not as common as lymphatic transmission Extension from the myocardium is necessarily rare,

although nearly all cases of tuberculosis are accompanied by pericardial inflammation, much more often is the myocardial tuberculosis secondary to that of the pericardium Even more rare than tuberculosis of the myocardium is tuberculosis of the aorta and of the 10 cases collected by George Blumer,[27] in none is any mention made of involvement of the pericardium Henoch[28] has reported a case of tuberculous pericarditis resulting from extension from tuberculous vertebræ, but this likewise is a rare occurrence No instances of direct extension of a tuberculous process through the diaphragm from the peritoneum into the pericardium have been observed, although transmission via the large lymph channels of the diaphragm has been seen

RESULTS

That tuberculosis of the pericardium may heal entirely is quite certain, but that the examples such as have been described in this series often heal I am much inclined to doubt Tuberculosis of the serous membranes may be accompanied either by definite lesions of tuberculosis, as in our cases, or, as A N Peron[29] has shown for the pleura, may present only evidences of inflammation without any anatomical characteristics This latter type may be due to the presence of the tubercle bacillus but more often, it seems to me, to the gradual diffusion of the sclerogenic toxins of the tubercle bacilli produced in the adjacent lesions of the lymph glands or pleura Such a process is quite analogous to the sclerosis of the connective tissue, devoid of tuberculous lesions, such as we often find about tuberculous glands in the neck and elsewhere Those cases in which a fibroplastic process is found extending from the base of the heart downward, always firmer at the base over which tuberculous glands are found, are illustrations of this point That the caseous form sometimes undergoes calcification and heals seems possible, but is an extremely rare occurrence, as mentioned previously, no such instances being found in the literature

Most important of the results are those due to effect on the heart In the acute form with massive exudation into the sac, dyspnea and other evidences of pressure upon the heart may appear Such a case is No 1 which presented all the evidences of a pericarditis with effusion Here the exudate was serous, and no suspicion of its tuberculous nature was entertained during life The heart was found greatly hypertrophied, weighing 700 grams, without valvular, renal or arterial lesions outside the pericardial effusion to account for it Adhesion of the layers seems much less likely to cause serious disturbance when due to tuberculosis than when due to rheumatism, although occasionally a fatal incompetence is found at autopsy to show no other ground for its occurrence than an adherent pericardium, which is usually adherent to structures outside In only one of the cases in our series (No 9) could heart atrophy be considered as due to the pericardial adhesions and the report is so meager that this is not certain The duration of the synechia before the fatal result in cases of incompetence is not long, in a case carefully observed from the day of onset, by Jaccoud,[3] it was 3½ months, and the same in one reported by Samson Gemmell[30] Hayem and Tissier[2] say it is usually four to eight months The reasons for the lesser malignancy of tuberculous synechia are many it is much less often accompanied by valvular lesions, the onset is slow and without profound toxic effects on the myocardium, such as are often seen in the "carditis" of rheumatism, the dilatation in rheumatism occurs either during the acute attack, when the valves and the muscle are both inflamed, or later, when the serous effusion is being absorbed, the pericardium fails to follow because of external adhesions, and deprived of its support the heart yields to the internal pressure and dilates, and further, relatively few cases of tuberculous pericarditis reach a chronic stage

H Marfan[31] considers the difference between the effects on the heart of tuberculous and rheumatic pericardium synechia to be sufficient to permit of a differential diagnosis to be made on the physical findings referable to the circulatory system in many cases independent of the history and other features These differences he says are as follows

Rheumatic Symphysis	*Tuberculous Symphysis*
Heart always very large	Size normal
Dyspnea more or less marked	Little or no dyspnea
Cardiac palpitation	Little or no palpitation
Strong apex impulse	Apex impulse difficult to perceive
Sounds irregular and strong	Regular, feeble fetal rhythm
Functional murmurs frequent	Functional murmurs absent

Adherent pericardium is frequently accompanied by the clinical picture to which the name of "pericarditic pseudocirrhosis of the liver" was given by Pick[32] He ascribed the condition of ascites occurring in these cases, often giving rise to the diagnosis of atrophic cirrhosis or tuberculous peritonitis, to connective tissue increase in the liver, the result of prolonged passive congestion V Eisenmenger,[33] pointing out that such increase is in the center of the lobule and does not cause the changes of an ordinary cirrhosis as the liver vessels are widened and not narrowed, states his opinion that the obstruction is either in the inferior vena cava after it has entered the pericardium, or through connective tissue proliferation in the fissure of the liver affecting the portal circulation In a large proportion of the cases of this condition in the literature the pericarditis was tuberculous However, in none of the cases of tuberculous pericarditis in my series, nor among the 17 reported by Osler[1] was such a symptom-complex present

The myocardium may be affected in two ways by a fibrous interstitial process, or by direct growth of the tubercles into the heart walls The interstitial myocarditis arising in this way is of little moment, especially when compared with that occurring in rheumatism being limited to the subepicardial tissue, often it is accompanied by a slight fatty infiltration which cuts out the superficial muscle, but rarely extends deeply The tuberculosis of the myocardium itself, extending inward from the pericardium, is of much more importance In the miliary form the tuberculous process is superficial, or may be accompanied by nodules developing elsewhere in the heart, especially beneath the endocardium Often in vascular tuberculous pericarditis the first development is in or beneath the epicardium, much more often than in the parietal layer In miliary tuberculosis the myocardial tubercles produce no evident effect, and even more completely than the accompanying pericarditis are not demonstrable clinically When the caseous form, however, invades the myocardium more extensive and important results may follow Eisenmenger[34] has observed two cases clinically and at autopsy, and thinks there is a possibility of this condition being diagnosed *intra vitam*, although this has not as yet been done He suggests as points the occurrence in an individual, especially in one in whom tuberculous pericarditis has been diagnosed, of a severe

rapid and progressive collapsed condition, secondly the finding of endocardial murmurs, weak in phase and variable in intensity While the right ventricle is most affected according to Eisenmenger the much thinner walls of the auricles render their perforation possible However the low blood-pressure within them seems incapable of causing a rupture, in none of the cases of tuberculous myocarditis recorded has this accident been noted In the writer's series in one case, No 8, caseation had extended through the wall of the right auricle and the caseous mass was capped by a thrombus A recent hemorrhagic infarct was present in the right lung showing microscopically no evidences of tuberculosis, nor for that matter were any tuberculous lesions at all found in the lungs indicating that probably no dissemination of tubercle bacilli from this thrombus had occurred Quite different was the result in the similar case reported by Puschmann [12] here the lungs were the seat of a general miliary tuberculosis which seemed to have come from a thrombus containing many tubercle bacilli that extended from a calcified and caseous mass penetrating the wall of the auricle In this way a tuberculous pericarditis may be the starting-point of a miliary tuberculosis Thrombi arising from tuberculous lesions are always rich in tubercle bacilli as Benda[35] has shown in his studies of miliary tuberculosis, and as was observed in Puschmann's case Myocardial tuberculosis is a rare lesion, occurring but once in 1000 tuberculous bodies according to Valentin [38] Charles Thiry[36] was able in 1899 to collect but 63 cases from the literature In addition to infection by extension and through the blood-vessels, Labbe[37] thinks it may come through the lymphatic vessels of the myocardium from the mediastinal lymph glands much as it reaches the pericardium However, it is to be considered that the cardiac lymph vessels differ from those of the pericardium in not anastomosing with other systems, so it is difficult to see how a retrograde flow of lymph from the tuberculous glands can occur This agrees with the fact that in tuberculous pericarditis of hematogenous origin the tubercles are most abundant beneath and in the epicardium while in the lymphatic form they are most abundant in the parietal layer

Myocardial tuberculosis may occur in several forms 1 miliary granulations generally in miliary tuberculosis 2, large tubercles volume may reach the size of a hen's egg, usually multiple, 3, diffuse tuberculosis, extending through a considerable part of the myocardium chiefly as fibrous tissue intermingled with nodular and caseous tuberculosis, very rare, 4, interstitial myocarditis with occasional tubercles scattered about in the fibrous tissue without caseation also rare The endocardium is not usually affected except in the miliary form and in perforation of the auricle on the other hand the pericardium is usually involved although not invariably Labbe[37] states that it is frequent in the young 15 in a series of 27 being under 15 years of age As before mentioned even a myocardial tuberculosis may heal Rosenstein[39] has reported a case of aneurysm beginning in a fibrous scar at the apex of the left ventricle in a tuberculous subject although the microscopic examination gave no anatomically recognizable tuberculosis Rosenstein thinks basing his opinion on the ground of an observation by Orth in a similar case that the scar had developed through absorption of necrotic masses of tuberculous origin

The tuberculous process may of course invade the first part of the large vessels within the pericardium This does not seem to have been observed in the human being, but in Professor Hektoen's case[17] of tuberculous perimyocarditis in the dog this had happened, with the formation of a beginning aneurysm of the aorta

Cardiotuberculous Cirrhosis—This is an interesting condition, from the anatomical standpoint especially It comprises the coexistence of tuberculous lesions with chronic passive congestion of the liver The lesions consist generally of a diffuse fibrous increase plus miliary or small nodular tubercles, but sometimes only diffuse sclerotic changes or fatty cirrhosis without tubercles It is due primarily to passive congestion whether of valvular, myocardial or pericardial origin, tuberculosis may add the lesions of fibrous increase or fatty degeneration Soullard[40] says that if the bacilli attack the liver early sclerosis predominates, if late the fibrous change is slight or absent and only the tubercles are found besides the congestion It is accompanied by a marked and permanent hypertrophy of the liver with recurring ascites cyanosis of the face and extremities dyspnea and edema, with cardiac insufficiency, in other words, the clinical picture is not dissimilar to that of the so-called pericarditic pseudocirrhosis Like the latter its duration is considerable even two to three years, with death either from asystole or generalized tuberculosis Cousin[41] divides the cases into three classes 1, pure cardiotuberculous cirrhosis, 2 cardiotuberculous cirrhosis with specific lesions, 3, fatty cardiotuberculous liver Tuberculous pericarditis offers all the essential requirements for the production of this condition and not infrequently the combination of tuberculosis of the pericardium and cardiotuberculous liver has been observed Hutinel,[42] in 1893, reported several such cases occurring in children and considers the matter extensively Since that time a number of isolated cases have been reported especially by the French writers

TERMINATIONS

It is quite possible for tuberculosis of the pericardium to heal, but healing generally does not follow the forms that do not have any acute stage It occurs almost exclusively in the form that is chronic from the outset and is, therefore, generally seen in pericarditis arising from lymphatic invasion, either from the lymph glands or pleura The healed pericarditis may present evidences of its tuberculous origin either in the shape of fibroid nodules in the exudate or in the pericardial walls, or as firm dry or calcified or caseous material, but this is extremely rare More frequently the adhesions show macroscopically and microscopically only fibrous tissue without a single trace of anything resembling the anatomical picture of tuberculosis The writer is inclined to the belief that this form of tuberculous pericarditis is from the start simply fibroplastic and at no time has contained tubercles or caseous material It may be recognized only by its relation to tuberculous mediastinal glands or pleuritis and the exclusion of any other etiologic factor by the history As before mentioned, while calcification of a caseous exudate is possible, it is impossible to find a well-authenticated case in which this calcification has been shown to originate on a basis of tuberculosis, hence it is probably rare Adhesions that result in the nonfatal forms are not necessarily permanent the incessant tugging by the heart leads to their gradual disappearance especially when they do not entirely obliterate the sac but this must be rare in tuberculous adhesions

The most usual termination is in death This may be due to interference with the heart in the stage of

effusion, or later to its firm union to the chest wall, lungs and diaphragm, as the result of a combined internal and external pericarditis More rarely the heart may be weakened by invasion of its walls by the tuberculous process, or a miliary tuberculosis may arise by the perforation of the auricle and dissemination of the bacilli by the blood stream as in Puschmann's[12] case Simple embolism, as in Case 8, might also cause death Hence it is possible that death may occur in an indirect way from tuberculosis of the lungs by infection of the mediastinal glands and thence of the pericardium, even after the original focus in the lungs is healed through its effect on the heart However, the cause of death in tuberculous pericarditis is most often not related to the heart at all, but results from the tuberculosis with which it is associated Tuberculous pericarditis is generally unaccompanied by any symptoms referable to the heart, and is almost always an autopsy finding

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TUBERCULOSIS OF FASCIA

J CLARK STEWART, M D

Professor of Surgical Pathology, Medical Department, University of Minnesota

MINNEAPOLIS, MINN

Under this heading I include all cases of primary tubercular infection of the fascia and those cases of fascial tuberculosis secondary to adjacent tuberculosis, in which the fascial involvement is of such an extent as to overshadow the original trouble There is little to be found on this subject in the surgical text-books, the article in Senn's "Principles of Surgery" having the most extensive consideration Current medical literature is equally silent, the only noteworthy article which I have seen being that by Dr J E Moore,[1] which treats the subject most satisfactorily from a clinical standpoint

CLASSES OF LESIONS

In general there are two typical classes of lesions resulting from tubercular infections, these differ widely, and between these extremes there are various gradations The cold-abscess type resulting from a rather acute infection by the tubercle bacillus, followed by cheesy degeneration, liquefaction and the formation of an abscess cavity filled with liquid detritus, stands at one extreme At the other is that class of lesions where, with a more chronic onset, and possibly a smaller dosage, the implantation and growth of the tubercle bacillus results in irritative changes shown by the formation of more or less dense connective tissue overgrowth with or without cheesy foci It has been too much the custom of surgeons to overlook this latter type, and the non-recognition of the tubercular character of such tissue has caused many operative failures

In no other form of tuberculosis are the two types above mentioned more perfectly demonstrable clinically than in tuberculosis of fascia And in no other lesion is the recognition of the form characterized by connec-

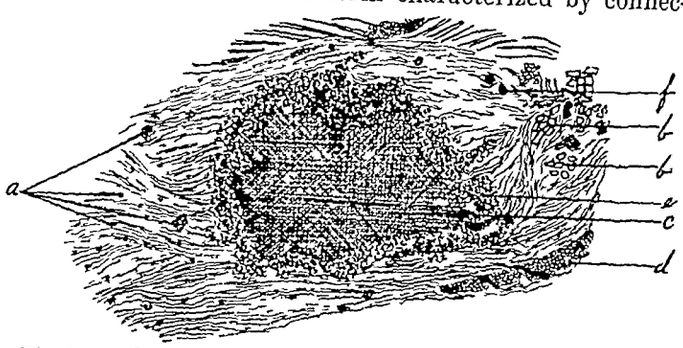

Fig 1 —a Miliary tubercles b, muscle fibers, c, cheesy center d, fat e, tubercle tissue f, blood vessel

tive tissue overgrowth more important both as to diagnosis and for proper treatment Dr Moore in the article cited recognizes the two classes of fascial tuberculosis, but his division into superficial and deep cases does not to my mind exactly define the existing difference

From a pathologic standpoint, I shall divide these cases into two divisions Class A, acute primary cases with extensive cheesy degeneration as their most marked feature, Class B, chronic mostly secondary cases, characterized by overgrowth of connective tissue with disseminated areas of caseation The clinical symptoms of both classes of cases are about the same except that those of the first class give a more acute onset and rapid course Both come on insidiously with more or less swelling of the affected part and local temperature, and after a time red or bluish discoloration of the skin Some patients suffer marked pain, and nearly all have a slight afternoon elevation of temperature After more or less delay the process reaches the surface, and characteristic sinuses are formed giving vent to thin tubercular pseudo-pus Usually there soon arises pyogenic infection with more marked fever and wasting, and this may occur before the sinuses have opened, causing a clinical picture closely simulating acute phlegmon

DIAGNOSIS

Diagnosis must be made by exclusion, aided in many cases by operation, and causative lesions in the neighboring bones and joints must be carefully searched for,

1 JOUR AM MED ASSN Aug 12, 1899

especially in Class B where they can almost always be found In Class A we find on operation, the familiar cold-abscess between the layers of some extensive fascia, and when, after careful search no contiguous tubercular lesion can be found in bones joints, pleuræ and lymph-nodes our diagnosis becomes established In such cases the layer of tubercular tissue lining the cavity lies upon a firm connective tissue membrane, and can be scraped therefrom by the sharp spoon, leaving a healthy smooth surface To illustrate

CASE 1—A Swedish street-car conductor aged 25, came into my service at Asbury Hospital in 1894, with a sinus in the middle of his right calf, discharging bloody purulent fluid His history was misleading, as he said that he had been well until within a few days, when his leg began to pain him and became swollen A physician saw him at this time and made an incision, evacuating a large amount of bloody fluid and diagnosing a hematoma I saw him one week later at which time there was a sinus with flabby granulations admitting a probe which passed freely to the vicinity of both knee and heel He had also greatly enlarged lymph-nodes in the neck and right axilla

Under anesthesia the large cavity was opened up by

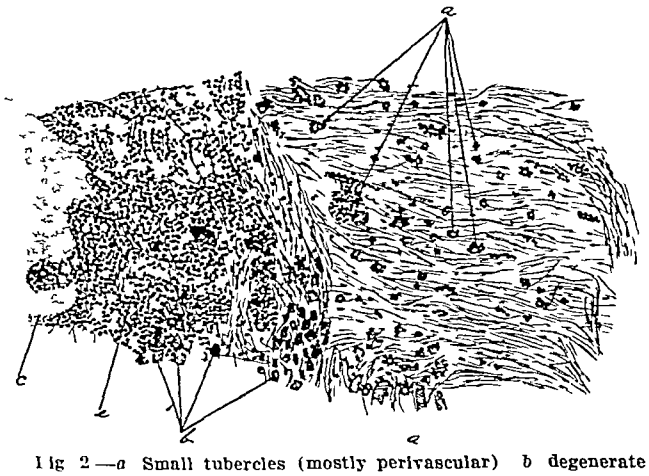

Fig 2—a Small tubercles (mostly perivascular) b degenerate muscle fibers c cheesy center e tubercle tissue

a median incision reaching from the middle of the popliteal space nearly to the heel The extensive flaps and the walls of the cavity were then scraped thoroughly with a sharp spoon, until a smooth surface was reached, removing a double handful of tubercular granulations, and revealing an eroded vein as the cause of the previous hemorrhage The long incision was sutured over iodoform gauze packing which was removed after forty-eight hours and pressure applied The large wound healed solidly in ten days, after which I removed the tubercular lymph-nodes in the neck and axilla He made a good recovery and is now (1900) alive and well

The tissue removed was examined microscopically and showed typical, rapidly formed tubercle tissue with many giant cells and a few tubercle bacilli There was considerable caseous degeneration, and there seemed to be nowhere any attempt to form fibrous tissue

I have observed this form of fascial tuberculosis only in the calf, thigh, and the muscles of the back, as a primary lesion or at least without any discoverable adjacent tubercular lesions

Class B differs greatly both in its gross and microscopic lesions, and the history is much more chronic and I believe that the majority of these cases coming under this class are secondary to other tubercular lesions

The important distinguishing feature of these cases is the production of large amounts of fibrous tissue and the occurrence of the cheesy tubercular material, not in one large cavity limited by a firm fibrous layer, but in multiple small foci which are scattered widely throughout the new-formed fibrous tissue Such cases can only be relieved by operation with the knife and scissors, instead of the sharp spoon, as every portion of the new fibrous tissue must be removed to insure non-recurrence Case 4, cited in Dr Moore's article, is the only primary fascial case of this type which I have seen operated on while the great majority have proved to have other tubercular lesions adjacent as their point of origin

As I have the gross and microscopic specimens from this case, I will reproduce here the history as given by Dr Moore in the article cited

CASE 4—F F aged 48 years a Mexican coffee planter, came to me in January 1896, suffering from hydrops articuli of the right knee The disease, although chronic was quite mild in character and yielded promptly to the treatment, which consisted of tapping, followed by irrigation with a bichlorid solution and rest in a plaster cast Twenty months later, in September 1897, he returned with a beginning tuberculosis of the fascia of the lower third of the left thigh There were two sinuses and the disease seemed to be superficial The part was laid open freely scraped, and packed with gauze On Jan 10,

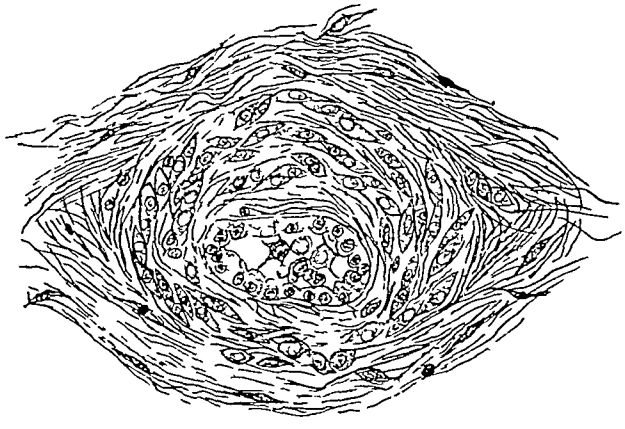

Fig 3—Small perivascular tubercle

1898, I operated a second time removing all the diseased tissue I could find On January 29, I realized that the last operation was a failure, and determined to operate again and be as radical as possible There were at this time several sinuses and a mixed infection and the patient was rapidly failing I made an incision from just above the knee joint to the tip of the greater trochanter At the lower third of the thigh a strip of integument two inches wide and eight inches long, which was perforated by the sinus, was removed A large portion of the fascia lata was removed, because it was diseased beyond all hope of recovery The disease was found dipping down into the vastus externus muscle to such an extent that it was necessary to remove the whole of that muscle It should be noted that this disease was in the left thigh, while the hydrops articuli had been on his right side The left knee was healthy, but its synovial membrane was being attacked from the outside, and in my efforts to remove all the diseased tissue I opened into the upper pouch of the knee A piece of synovial membrane two inches long and one inch wide was removed and the opening into the joint immediately closed with a running catgut suture, and although the patient was suffering from a mixed infection at the time of operation, no joint symptoms followed This enormous wound was closed, and with the exception of a small spot at the lower end, where there was a small slough it healed by first intention

The slough soon separated, and the wound granulated over without return of tuberculosis The patient left the hospital in less than three weeks, and very soon after returned to his Mexican home Before he left he walked into my office with a cane, and the function of his limb was remarkably good considering the amount of tissue removed

In May, 1899, I received a report that his leg was giving him no trouble, but that his general health was failing and that he had a cough

Please note that while this case was primary in the fascia, it was only after recurrence that it took on this more disseminated form

CASE 2 —A robust looking Swedish farmer, aged 30, was admitted to my Asbury Hospital service with a clear case of caries sicca of the right shoulder, of some months' duration In addition there were several sinuses about the joint, not leading to bone, or to the joint On operation there was found a diffuse tuberculosis of the fascia about the shoulder, including the intermuscular septa between the muscles of the post-scapular group All the new tissue was removed by an extensive dissection, and the wound soon healed except a sinus which now for the first time led to bare bone near the joint At a later date this was followed to the head of the humerus, which was excised, after which the sinus closed He recovered with a useful arm and has remained well up to the present time five years after the beginning of his tuberculosis

Figure 4

CASE 3 —A more recent case illustrates well the early stages of this interesting process A woman of 30, after a general septicemia due to an abortion developed an osteomyelitis of rather mild type which resulted in an enlargement of the lower third of the femur, without sequestra or sinuses She had little trouble for four years, when she came in with what she called a boil on her thigh over the enlarged bone This was incised and a small sequestrum, a mere splinter, taken out, there was then noted an induration about the sinus, and extending a short distance down the thigh Two weeks later she was operated on under anesthesia, and on incision a mass of tissue as large as a goose-egg was found surrounding the sinus and extending some distance along the fascial planes The small sinus led through this mass into the femur where there was a tubercular deposit one-half inch in diameter, situated in the new osteomyelitic bone This was chiseled out so as to form a smooth-walled cavity of conical form, packed with gauze, and the patient made a slow but uneventful recovery

On section of the removed tissue, it was found to consist of quite cellular new connective tissue containing numerous small cavities filled with gelatinous-looking tubercle tissue which had not as yet undergone cheesy degeneration

CASE 5 —Through the kindness of my colleague in the university, Dr S M White, I am able to show the microscopic findings in a still more recent case than any reported While making an autopsy on a tubercular subject, Dr White infected the middle finger of his left hand, at the site of a small wart on the palmar surface About two weeks after infection there formed a small abscess which contained staphylococcus pyogenes aureus The abscess healed, but after a few weeks a swelling appeared on the back of the finger and gradually increased in size until, in February, 1900, there was a diffuse enlargement of the finger, mainly along dorsum

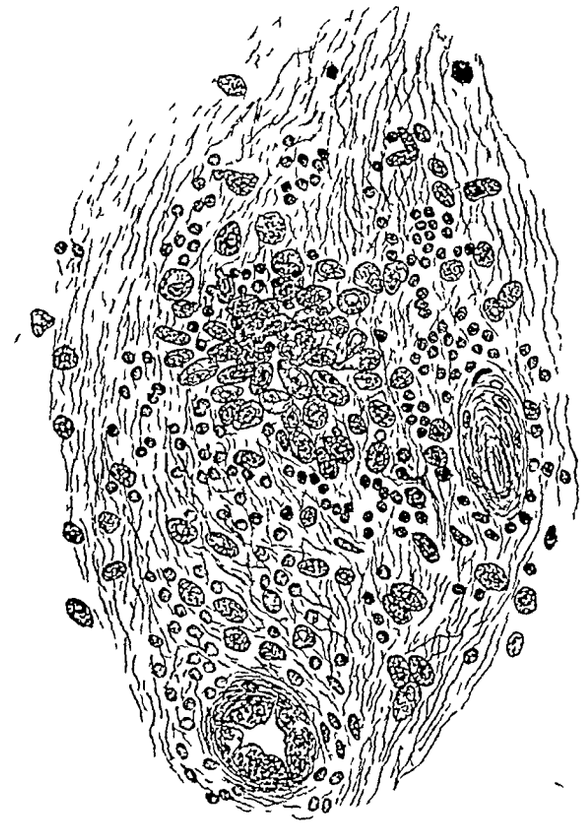

Figure 5

Various methods of treatment were used without avail until March 3 1900 At this time I operated under cocain, and dissected away a saddle-shaped piece of fibrous tissue about three-sixteenths of an inch thick at the center It was grayish, and succulent, but gave no macroscopic signs of tuberculosis This tissue had to be dissected away very carefully from the capsule of the joint and the sheath of the extensor tendons and had so involved the latter that in one or two places small openings were made into the lumen of the sheath The wound was sutured and healed per primam There has been no recurrence up to date

Sections of this tissue show new connective tissue rich in cells, with many aggregations of round and polyhedral cells, but no cheesy degeneration A piece of this tissue was emulsified with sterile broth and injected into the peritoneal cavity of a guinea-pig It died tubercular and tubercle bacilli were demonstrated in the lesions found at autopsy

This second form of fascial tuberculosis is vastly more serious than the first, as it regularly involves the intermuscular septa and the sheaths of tendons and muscles, and passes easily to adjacent joints

A successful operation against these cases must often be most extensive and a neglected case will occasionally demand an amputation when an extremity is affected, or prove irremediable when upon the trunk Neglected cases of the first type may pass into the second, but when operated on promptly and thoroughly, they heal rapidly and do not relapse

A case seen two years ago, in the service of Dr F A Dunsmore illustrates how a fascial tuberculosis springing from an insignificant bone lesion, undiagnosed and untreated, may baffle conservative surgery The case was a woman of 40, from outside the city The history was fairly acute and gave no indication of the bone lesion The lesions present were a general tuberculosis of the fascia of the forearm, including intermuscular septa, tendon sheaths and even the interosseous membrane, all of which arose from a small chronic tubercular focus in the lower end of the radius The arm was swollen to three times its natural size, and gave me the impression of a rapidly-growing sarcoma but on incision there was only found a gelatinous connective tissue everywhere, with only an occasional cheesy focus

Any operation here, to be successful, would have necessitated the removal of all the fascia, together with all the connective tissue covering the muscles, vessels, etc and was plainly impossible so the arm was amputated

I am inclined to believe, after a careful study of a number of these cases, that those of the first class are caused by a rapid and simultaneous infection of the wide fascial planes by the tubercle bacilli, as the lesions appear to be all of one age and are without the connective proliferation characteristic of the more chronic tuberculoses The lesions correspond quite closely to those seen when a joint is infected by the rupture into its cavity of a cheesy bone focus, with the rapid spread over the synovial surface of a large amount of tuberculous material Those of the second class, on the contrary, resemble primary joint tuberculosis where the infection has arisen at one point and spread gradually over the joint tissues Here we have lesions of various ages, but always the characteristic fibrous tissue, containing more or less widely scattered cheesy foci, or in more recent cases non-cheesy tubercular tissue

The proportion of the connective tissue to the cheesy foci varies according to the chronicity of the process, there being cases (Case 5, cited) where the naked eye shows no indication of the tuberculosis but merely great overgrowth of connective tissue, but where the microscope and animal inoculation prove the presence of tuberculosis In other cases the cheesy foci predominate and attain fairly large size, but they never, I think, in this form reach a size entitling them to be called cold abscesses

Through the courtesy of Dr and Mrs Nickerson, my colleagues in the medical department of the University of Minnesota I am able to illustrate this article with drawings which quite satisfactorily fill the place of the sections shown when the paper was originally read Cuts 1 2 and 3 are from Dr Moore's Case No 4 Cut 1 is a somewhat schematic low-power drawing showing a large cheesy focus surrounded by tubercle tissue the whole being enclosed in dense fibrous tissue containing scattered tubercles Cut 2 is from the same section under higher power and shows the details of the tubercular zone about the cheesy center and also very well the scattered tubercles in the dense connective tissue area

Cut 3 shows a beginning perivascular tubercle like any of those marked "a" in Cut 2, the obliterating tubercular endarteritis, and the concentric arrangement of the epithelioid cells about the artery are well shown in this tubercle

Cuts 4 and 5 are made from a section of the tissue removed from Dr White's finger Cut 4 shows the lower power appearance of what seemed to the naked eye to be normal fibrous tissue A large tubercle is shown in which cheesy degeneration is just beginning, and numerous smaller tubercles

Cut 5 shows the details of the small tubercle "a" of Cut 4 There is here merely a massing of oval epithelioid cells and leukocytes, without the regular arrangement seen in the more slowly formed tubercles of Cut 2 The vessels seem to be taking a part in the process, as shown by the swollen and proliferating endothelial cells but there are no well-formed perivascular tubercles

SUMMARY

1 Tuberculosis of the fascia occurs with sufficient frequency to entitle it to more attention than it has received in the past 2 It occurs in two well-marked forms 3 The recognition of these forms is essential to its proper surgical treatment 4 Fibrous tissue associated with, and resulting from tubercular infection is to be viewed as tubercular tissue, and treated accordingly 5 Such fibrous tissue may in some cases need the test of animal inoculation to absolutely prove its tubercular character

704 Dayton Building

SARCOMA OF THE PANCREAS *

(From the Laboratory of Pathology of the Chicago Policlinic)

GEORGE A BOYD MD

BALDWIN, KAN

Litten[1] was the first to report a primary sarcoma of the pancreas in which the microscopic findings were recorded His case occurred in a boy 4 years old The tumor weighed fifteen pounds Virchow made the microscopic examination and found a small round-celled sarcoma This was in 1889

Senn,[2] in 1886, reported two cases of sarcoma of the pancreas, one from Mayo's "Outlines of Human Pathology," published in 1836 As this was probably the first case of primary sarcoma of the pancreas it will be given with some detail Quoting[3] from the original work

Malignant disease rarely attacks the pancreas alone but involves in common with it either the stomach or liver or both

A gentleman aged 35, died after an illness of about eighteen months duration in which it was to the last impossible to say what organ was the seat of the disease His complaint began with a febrile attack which left him weak and from that time he was liable to dyspeptic symptoms with variable appetite and an undefined uneasiness in the epigastric region He gradually lost strength and flesh and when he consulted Dr Newbegging in January 1822 he was found thin and weak, but Mr N was particularly struck with his remarkable paleness even his lips and the inner surface of his mouth was entirely without color About this time he had some vomiting and was feverish for a day or two When I saw him in April he was reduced to the last degree of paleness and debility but his pulse was full strong, and regular He died at the end of April without any change of symptoms except that his pulse became frequent a few days before his death

* Read before the Chicago Pathological Society

Inspection—All of the internal parts were found remarkably pale and void of blood the heart was sound but remarkably empty The pylorus was thickened and firmer than natural and had contracted an adhesion to the pancreas The pancreas was considerably enlarged and of nearly cartilaginous hardness except some spots which were soft with the appearance of the medullary sarcoma No other disease could be detected in any other part of the body

The histologic character of this tumor must remain unknown Its history does not exclude carcinoma

Senn reports a case of Lepine and Cornil[4] which occurred in 1874

In 1880 Bartley[5] reported a case of spindle tumor of the pancreas, to the New York Anatomical and Surgical Society The tumor occurred in a farmer 22 years old The tumor began, it was supposed, six years before his death, at which time he suffered from epigastric pain at the time ascribed to a strain Two years later the pain returned and occurred with constantly shortening intervals until the pain became continuous One year and a half before his death he

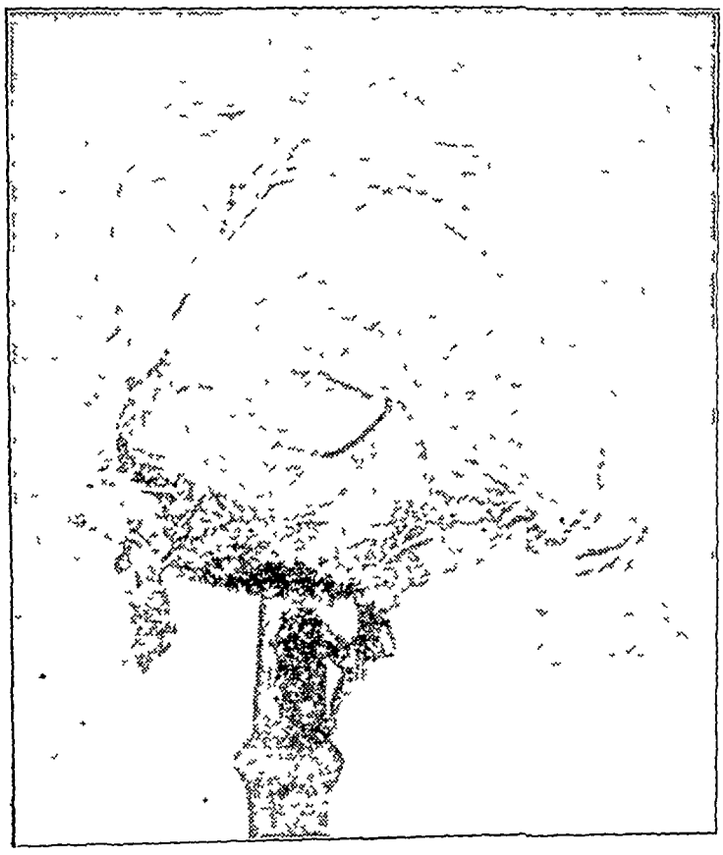

Fig 1—Sarcoma of the pancreas The lower part of the photograph shows the colon adherent to the tumor

consulted a physician and was treated for gastralgia cardialgia and dyspepsia In the fall of 1879 he came to Chicago to seek medical aid He died one month later and the necropsy showed tumor of pancreas adherent to the stomach, splenic vein, hepatic and gastroduodenal arteries The lymph nodes along the aorta were enlarged The head of the pancreas was the "size of the fist" and the tail the "size of the wrist" The tumor was firm in consistence and microscopically was a spindle-celled growth The reporter, while recognizing it as probably sarcoma, reports it as carcinoma The age of the patient supports the diagnosis of sarcoma, which no doubt it was

In 1892, Mansilla[6] reported a case occurring in a man 54 years old Microscopic examination showed "embryonic sarcoma" of the pancreas, with metastatic deposits of the same character in the liver

Primary sarcoma of the tail of the pancreas in a man 74 years old, with metastases in the liver and peritoneum, was reported by Blind[7] in 1894

Ehrmann,[8] in 1896, reported a case of primary sarcoma of the tail of the pancreas in a woman 56 years old, with metastases in the liver and pleura

Picola[9] is generally credited with two cases, a distinction he did not claim He states that in one the primary growth was in the liver and the pancreas was involved secondarily The case he reports as primary sarcoma of the pancreas occurred in a man 54 years old There were three small tumors in the head of the pancreas, the largest one the size of a walnut and the others the size of peas, their surface smooth and pink in color On section, the color was gray There were adhesions with the hilus of the liver, with the intestines and metastases in the abdominal lymph nodes The bile-ducts were dilated and the alveolar epithelium necrotic

Churton[10] reported a round-celled sarcoma of the pancreas The connective tissue of the pancreas was infiltrated with small round cells, and the lobules invaded There were metastatic deposits in the liver and adhesions between the pancreas, left kidney and the spleen In this case there was glycosuria

Neve[11] met with a case in a man 64 years old The growth involved the pancreas and pylorus It was firm yellow and on section glistening and fibrous with small areas of darker color It looked like a scirrhous carcinoma The microscope showed it to consist of "highly nucleated" spindle cells interlacing at all angles There were no epithelial cells

Schueler,[12] in 1894 reported a case in a man 38 years old The patient was an alcoholic He vomited and suffered pain in the cardiac and costal regions There was pain on pressure over the xiphoid process Eating caused the pain to grow worse Palpation showed a tumor the size of an egg in the left part of the liver Exploratory puncture showed a reddish brown fluid Autopsy showed a large cystic tumor of the pancreas containing 2 liters of brown fluid In part of the pancreas, not cystic, there was a large spindle-celled sarcoma Metastases were found in both pleuræ and the third and fifth dorsal vertebræ In this case there was no free hydrochloric acid found in the stomach

The Spanish have another case reported by Machado[13] in 1883

Aldor,[14] in 1895, reported a "medullary sarcoma" of the pancreas in a man 45 years old The tumor was the size of a man's fist and had perforated into the stomach and was adherent to the spleen and duodenum

Frohwein[15] reported a case in 1897 of a spindle-celled sarcoma of the pancreas

Ehrmann[16] described a case of primary sarcoma of the tail of the pancreas with metastases in the liver and pleuræ Both the primary neoplasm and the metastases were of the small round-celled type

Italia[17] reports the most recent case found recorded The tumor occurred in a man 70 years old The first symptoms were noticed in February, 1899, and death occurred in September following The tumor was about the size of an orange and painful on pressure Diagnosis was made in this case during life The autopsy showed a large amount of peritoneal effusion The tumor of the pancreas was round but distinctly limited Metastatic nodules were found in the liver The tumor in the pancreas was a small round-celled sarcoma, while the deposits in the liver were of the large-celled variety

The pancreatic tumor was considered the primary growth

In the seventeen cases summarized three may be questioned, two of them, Mayo's and Butley's because the evidence of sarcoma is not complete and one reported by Schueler might have been secondary to the tumor growth in the vertebræ They have been included in the list of primary sarcomas because it is more probable that they belong there than in the seriously questioned list

There are tumors reported as primary sarcoma of the pancreas where the evidence is incomplete

Paulicks[18] case, generally included among the recorded cases of primary sarcoma of the pancreas, occurred in a young man who died of pulmonary and intestinal tuberculosis The tumor gave rise to no symptoms, yet it is reported as a round-celled sarcoma The question as to whether this was a tuberculous pancreas does not appear to have occurred to the reporter

Briggs[19] reported a case in 1890 occurring in a woman 45 years old The tumor was a cyst filled with two liters of grumous dark fluid in which were found the hooklets of the echinococcus The tumor was removed, and the patient recovered and remained well at the time the report was made The period elapsed since the operation was not given The tumor was reported as "sarcomatous," with no microscopic detail

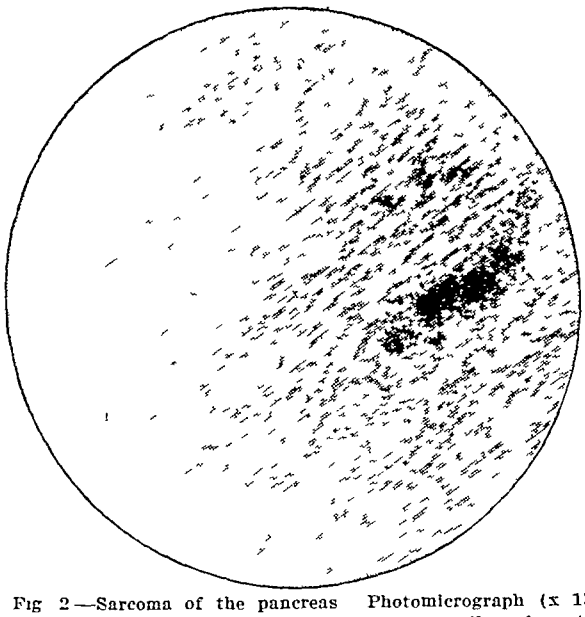

Fig 2—Sarcoma of the pancreas Photomicrograph (x 150) Showing the proliferating spindle shaped tumor cells taking their origin from the adventitia of a blood vessel

Billroth and Bozeman are both credited with a case of sarcoma of the pancreas, but the conditions found were cysts, not sarcomas Ehrmann included in his list a case reported by Bruen[20] in 1883 He describes a colloid tumor of the head of the pancreas but gives no microscopic report

Chiari[21] reports a metastatic growth in the pancreas occurring secondary to a sarcoma in the eye This case has been included in reports, but should be excluded from the cases of primary sarcoma Some cases not reported as sarcoma of the pancreas are worth reviewing because they lead to the conviction that they were sarcoma If sarcoma has not been recognized in these cases it may not be its absence so much as a failure to properly diagnose the tumors of the pancreas that has made it so rare that Ziegler states that "they are extraordinarily rare' Orth that "they are almost unheard of" Hamilton is silent and so is Delafield and Prudden, while Stengel gives the subject three lines in his latest work

Pepper,[22] in 1871, reported a case of tumor of the head of the pancreas in a man 45 years old Necropsy showed a cyst the size of a walnut, filled with blood, the cyst cavity trabeculated with fibrous bands and lined with smooth mucous membrane The cyst communicated with the duodenum The microscope showed the acini of the glands diminished in size and the "epithelium in state of granular degeneration" with an abundance of oil globules "After the fat was dissolved out with sulphuric ether and acetic acid was added, an immense number of elongated nuclei attested its vigorous nutrition and growth" The fact that the growth was not in the epithelial structures, and that the nuclei were elongated is very suggestive of sarcoma

Dieterich[23] in a report of 145 cases of melanotic tumors, in 1887, mentioned a case of sarcoma in a child 2 years old There is no report of a microscopic examination

REPORT OF CASE

The case which is here added to the list of primary sarcoma of the pancreas, occurred in the practice of Dr M L Harris The patient entered the Policlinic Hospital, Nov 16, 1898

History—N B, aged 47, a male, was a driver of a coal wagon His father died at the age of 60, the cause unknown, his mother at 64, the cause unknown Two brothers were living and well, also one sister The patient used alcohol lightly, but no tobacco His health was good until June, 1898, when pain appeared to the left of the median line a little below the umbilicus He felt a lump the size of a large apple and rather firm which increased in size His bowels were regular There was no history of an injury At the time of entering the hospital he vomited two or three times a week The vomit was sour at times His weight had fallen from 165 to 140 and he had lost much in strength, and then had a tendency to constipation His pulse was 70, temperature 99 F, respirations 20 At the time of admittance the urine was of straw color, aromatic in odor, with an acid reaction a sp gr of 1028, no albumin, no sugar, no casts His abdominal measurements were as follows Maximum circumference, 95 3 cm, circumference at umbilicus, 94 6 cm, circumference at crest, 91 cm, from maximum circumference to ensiform cart, 11 7 cm, from umbilicus to ensiform cart, 16 cm from maximum circumference to symphysis, 20 5 cm, from umbilicus to symphysis, 16 5 cm, from umbilicus to ant s s proc (l) 22 7 cm, from umbilicus to ant s s proc (r), 22 3 cm, from max circum to ant s s proc (r), 24 cm from max circum to ant s s proc (r), 24 5 cm

On November 23, an exploratory laparotomy was made by Dr Harris, and an inoperable large tumor of the pancreas found The patient gradually lost, his pulse and respirations gradually increasing in rapidity, while the temperature was many times subnormal up to a short time before death, when it ran up to 103 F The autopsy made by Dr Herzog was from necessity very incomplete no regular autopsy being permitted, the body had to be shipped immediately

The tumor, after having been removed from the abdominal cavity, was irregularly quadrilateral in shape and measured 17 cm transversely, 20 cm anteroposteriorly, and 24 cm in the vertical diameter Its vertical circumference was 72 cm, the transverse 71 cm Its walls were firm, pale, slate colored, mottled and irregularly lobulated The whole tumor was covered with thickened peritoneum, except when stripped off by attachments to the stomach spleen and liver, and where it was applied to the transverse colon between the layers of the transverse mesocolon Posteriorly it was not adherent to any of the large blood vessels or to the kidney There was a depression on the upper right posterior surface of the tumor, as if made by the liver The posterior layer of the lesser omentum

was folded over the tumor giving it the complete peritoneal covering At no point was the tumor fused with the structures to which it was attached by peritoneal adhesions The transverse colon was attached along the entire anterior inferior border of the tumor, but the gut walls were nowhere invaded by the tumor growth When the tumor was cut open it was found to contain in its interior a cavity 13 by 11 by 10 cm The cavity was subdivided into two compartments by a septum formed by the tumor tissue The roof of the lower compartment and the internal surface toward the left side were perfectly smooth Most of the right internal surface and most of the floor were uneven and covered with a ragged grumous mass Here the tumor tissue had broken into the smooth internal lining of the cyst The upper compartment of the tumor cavity had evidently not originated as a true cyst, like the lower compartment It was an irregular pyramidal cavity with a very ragged and irregular internal surface The cavity was partly filled with broken down tumor tissue The tumor wall surrounding the central cavity in varied thickness from 5 to 10 cm The tumor tissue on section appeared divided by connective tissue trabeculæ into roundish and oval nodules varying in size from a fraction to several centimeters in diameter Near the outer surface the tumor tissue was grayish white and quite solid, more toward the interior it assumed a light dirty brown, was spongy and honeycombed The transverse colon, as stated before, was firmly attached to the anterior lower aspect of the tumor When cut open the gut showed an intact mucous membrane, the tumor not having involved the walls of the gut

The microscopic examination showed that when the tumor had not undergone any retrograde or degenerative changes it consisted of large spindle cells These cells took their origin from the adventitia of vessels The cell nuclei were generally fusiform, some decidedly rod shaped, others oval and even round They generally contained one or two nucleoli and a moderate amount of finely granular chromatin The cell protoplasm was quite abundant and stained deeply with eosin

The tumor cells formed bundles and masses which interlaced each other freely in every direction Thin walled blood vessels were abundant At some distance from the surface the tissue exhibited a tendency to retrograde changes Here the cells showed coagulation necrosis, and the nucleus became indistinct, likewise the cell body Deeper still the nuclei disappeared and a rarefied tissue was formed which looked like myxoid tissue In such necrotic places extravasated blood was found free between the degenerating tumor tissue

The grumous material found in the interior of the tumor consisted of necrotic cells mixed with free decomposing blood, fibrin and hematoidin granules In some places the necrotic tissues showed numerous polynuclear leucocytes, some exhibiting nuclear fragmentation One of the pieces of tumor examined showed where the tumor had been attached to the wall of the stomach The viscus wall was thin and atrophic

The capsule of the tumor consisted of coarse connective tissue fibers with slender fusiform deeply staining nuclei No endothelial cells were seen on the capsule

The kidney showed marked congestion of all the vessels The epithelium lining the uriniferous tubules showed cloudy swelling Many of the tubules were filled with a granular material and some contained hyaline casts The interlobular connective tissue of the liver was moderately increased The peripheral cells of the lobule were fairly normal, but in the central zone they were densely filled with bile coloring matter Both in the peripheral and central zone a number of liver cells showed cloudy swelling The spleen pulp was densely crowded with erythrocytes In such places hemosiderin was found in large amounts In other places the pulp cells showed a tendency to become fusiform The myocardium was normal

From the microscopic examination it was evident that we were dealing with a malignant connective tissue tumor—a sarcoma The neoplasm, as appears from the history, grew rapidly, and speedily led to a profound cachexia While the tumor formed adhesions to several of the neighboring organs it had not broken through any of them nor had it given rise to metastases The absorption of the ptomains had produced a chronic splenitis and changes in the liver, partly parenchymatous, and partly indicative of early interstitial cirrhotic changes

I here express my gratitude to Dr Herzog for his assistance in preparing this report

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A CASE OF EPITHELIOMA DEVELOPED ON THE BASIS OF A HEALED LUPUS VULGARIS TREATED BY X-RAYS *

DAVID LIEBERTHAL M D
CHICAGO

The patient, a tradesman, a native of Poland, is 53 years old, and does not remember ever having been afflicted with any disease, with the exception of that herein described His parents, who are dead, enjoyed good health and neither they nor any other of his relatives were subject to skin affections He has eight children, and two grandchildren, all enjoying good health At the age of about 2 years there developed behind his left ear a growth which soon exulcerated, and in the course of a few years his face, especially the nose and mouth, became affected The skin thus diseased repeatedly broke down and rehealed The mouth gradually became so closed that he could only insert his little finger

At this stage the nose, which meantime had repeatedly broken and healed, began to break down until its tip was destroyed at about the age of 12 years He was then brought to the University Clinic of Koenigsberg There the ulcerating surfaces were regularly treated with the thermocautery under chloroform anesthesia The ulcers healed but the mouth grew smaller by cicatrization, and the nose was closed up During his stay of a year in Koenigsberg he took cod-liver oil, a tablespoonful three times daily He was then sent to the clinic in Berlin, where he underwent an operation consisting of wide incisions at the angles of the mouth and transplantation of mucous membrane from the cheeks upon the wound surfaces The residue of the nose, which had healed up during the treatment in Koenigsberg, had no opening, and inasmuch as the patient did not consent to the formation of a new nose, it was decided to render it possible for him to breathe through the organ To this end there were made two

* Presented to the Chicago Medical Society, Jan 2 1901

symmetrical openings into which were placed silver tubes fastened with bandages But the septum soon sloughed, and a single opening resulted, which remained permeable and permitted him to breathe freely He stayed in Berlin about two years and during that time continued the use of cod-liver oil, a tablespoonful three times a day He considered himself cured, and soon after immigrated to Chicago, some thirty-eight years ago Until about a year ago his condition gave him no concern He then felt a painful nodule behind his left ear About eight months ago a wart the size of a bean developed on the left side of the lower jaw, and slowly enlarged It was itchy and soon showed openings out of which exuded whitish, worm-like masses on pressure The tumor continued to increase in size, and during the last eight weeks developed more rapidly to its present condition Pain is felt at times, and then on the lower border of the tumor only He is of strong build, and of good health On the neck just behind the left ear a scar is visible at the seat of the first affection of the skin On the left side of the forehead is another scar On the cheeks and chin, especially around the

nose and mouth there are extensive scars The tip of the nose is absent, and on its site there is cicatricial tissue, with a hole in the center The red border of the lips is uneven owing to cicatricial contraction and for the same reason we find deep fissures at the angles of the mouth and on the mucosa of the cheeks Over the left zygoma we see infiltrated skin with a red, glossy, somewhat scaly surface The patient states that he noticed it since he wore a bandage for the fixation of the silver tubes On the left side of the face and neck we see a bluish-red lobulated cauliflower-like tumor raised about half an inch above the level of the surrounding surface Around the upper margins of its base scars are visible It has the shape of a triangle with its apex in the middle of the cheek and its base about 1½ inches beneath and parallel to the margin of the lower jaw It is movable with the skin has a soft consistence and overlaps its base At the junction of the tumor with the seemingly healthy surrounding tissue deep fissures are to be seen On its surface a grayish-white, ill-smelling exudate is visible, which increases in quantity by pressure At times there is pain in the lower and posterior part At the level of the posterior angle of the left lower jaw is found a bean-sized round, hard, retromaxillary gland I have to add that the respiration through the nose, as well as the sense of smell, is unimpaired

Judging from the history, and more especially from the sequelæ of the skin disease which he acquired in early childhood, there remains but little doubt that it was a case of lupus vulgaris The tumor on his face is clinically an epithelioma, which opinion is confirmed by the microscopic examination

In regard to the prognosis, it is a well-established fact that epithelioma developed on a scar of lupus vulgaris gives but little prospect

Drs Anthony and Harris, who saw the case with me suggested the application of the x-ray, and Dr Haisclden of the x-ray department of the Chicago Policlinic commenced the exposures

Since the presentation of this case the treatment has been continued Beginning December 26, the exposures were made twice a week After the third exposure January 7 the skin in the vicinity of the tumor reddened, whereupon they were discontinued for one week and after the disappearance of the irritation were repeated twice a week during January and February, during the first three weeks of March every other day and during the last week of March and first of April every day except Sundays Since then no exposures have been made The primary current used for the induction of the secondary was between 8 and 12 volts and 1½ amperes, interruptions averaged 800 per minute the distance from the exposed surface varied from 6 to 3 inches, and the time of exposure from ten to twenty-five minutes

After the third exposure there was noticeable diminution of the secretion and at times the tumor appeared perfectly dry It had also flattened to a slight degree but had spread downward and toward the chin about an inch Seeing that the growth had not been checked the use of the x-ray will be discontinued I believe

that in incipient cases good results may be obtained by the x-ray I would refer here to cases thus treated and cured by Drs W Johnson and W H Merrill [1]

S Steenbeck reported at the International Medical Congress, Paris, August 1900, two cases of cancer of the nose, one of which had developed upon lupus vulgaris, both cured by the x-ray All these cases were of very small size

In conclusion, I take great pleasure in expressing my gratitude to Dr H J Haiselden for his painstaking application of the x-ray

103 State Street

URETERAL IMPLANTATION INTO THE BOWEL FOR DIVERSION OF THE URINE *

AN EXPERIMENTAL RESEARCH

JACOB FRANK, M D

Surgeon to the German Hospital, Consulting Surgeon to St Elizabeth's Hospital and Jewish Orphans Home, Member of the American Medical Association, Fellow of the Chicago Academy of Medicine, Etc

CHICAGO

I fear that I have chosen for my paper a subject which may seem old and of comparatively little interest to some, and have consulted therein rather my own tastes and inclinations The diversity of surgical conditions, brought about in the course of some pelvic or abdominal operation, to the ureters is sufficiently large and the number of cases met with great enough to make the subject of interest to every surgeon

Again, the numerous pathologic conditions to which the urinary bladder is heir, which must sooner or later terminate fatally unless some means of relief can be afforded, have been sufficient incentive for experimenting in search of some surgical means that would furnish relief to those unfortunate sufferers

The establishment of an artificial communication between the ureters and the intestines by means of surgical procedure should not be one of choice, but of necessity It is applicable only in those cases where other means for the preservation of the kidneys are impossible or contraindicated In cases of ureterovaginal fistula the operations of Schede, Simon, Landau, Bandl and Pozzi should first be tried If these attempts fail, intestinal implantation is much preferable to nephrectomy, which should only be done as a last resort In carcinoma of the bladder, where the outlets of the ureters are encroached upon and entire resection of the bladder is indicated, ureteral implantation is all that can be done The same holds true in severe cases of tuberculosis but the renal lesions which are so apt to exist at the same time render permanent benefit unlikely Unilateral anastomosis is indicated in those cases where the ureter is wounded higher up, as may happen during the course of an intra-abdominal operation, or where trauma or morbid processes have brought about the same result Loss of substance of the ureter, if the ureteral wall is in such a condition that it can not be united, as after the removal of a calculus, may be treated by intestinal implantation In exstrophy of the bladder I believe that vesico-rectal anastomosis will give the best results for urinary diversion Much has already been done in this field of surgery, and I will give a little semi-history of ureteral implantation into the intestine The union of the ureters with the intestinal tract may be accomplished by means of a mechanical device or suture, in three ways, viz 1 The severed ureters may be anastomosed in the region of the rectum, with some portion of the ascending or descending colon, or even into the small intestine 2 An anastomosis may be accomplished by implanting the vesical trigone in the intestine 3 A permanent fistula may be established between the bladder and the rectum

The first efforts made to direct the course of the urine into the intestine were in cases of exstrophy of the bladder Simon first attempted this after the suggestion by Roux in 1851, upon a human patient, by passing a loop of thread through the walls of both the ureter and rectum, and tying them tightly together

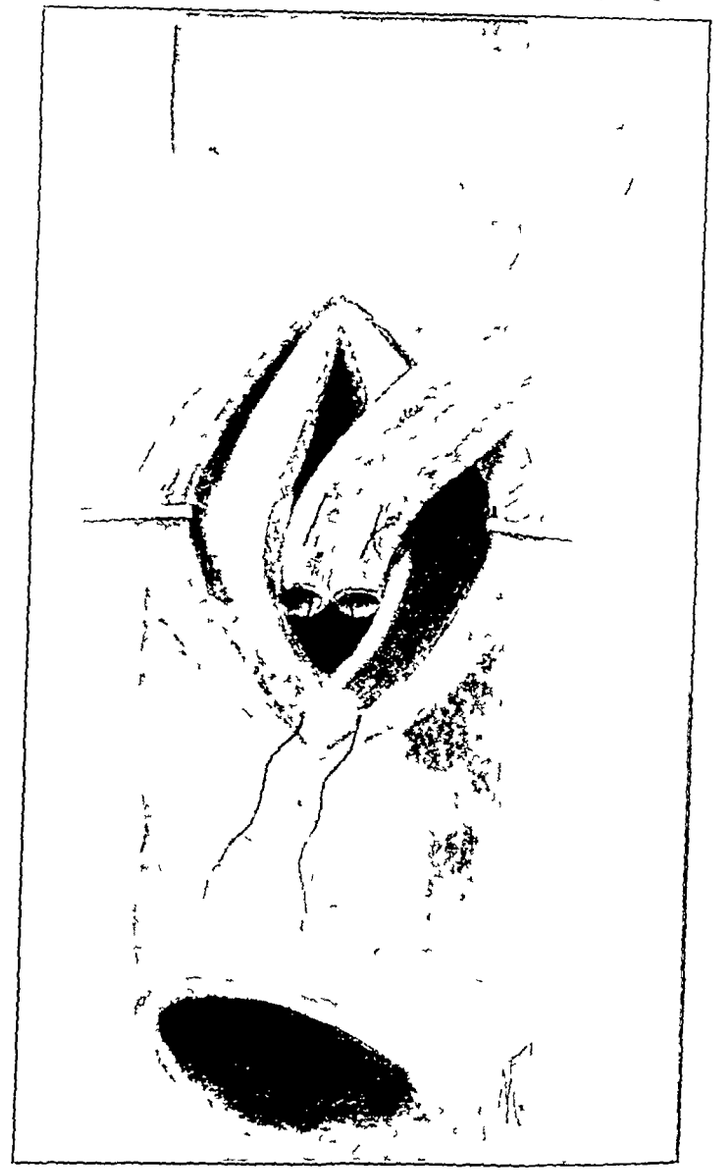

Figure 1

Necrosis occurred at the point of ligation, and a fistula resulted The patient died of pyelonephritis Thomas Smith, in 1879, sutured successively the two ureters into the colon, but death quickly followed the second operation The autopsy showed that on the left side, the first one subjected to operation, the point of exit of the ureter was obliterated, causing hydronephrosis On the right side pyelonephritis and inflammation of the ureter were found These fruitless attempts found few imitators, and the question seems to have been held in abeyance for a few years In 1881 Glucke and Zoller published their unsuccessful attempts at implantation of the ureters into the rectum, and empha

1 "The X-ray in the Treatment of Carcinoma" Philadelphia Medical Journal, Dec 8 and 15, 1901

* Read before the Chicago Academy of Medicine, Jan 11, 1901

sized the importance of stricture formation with hydronephrosis About the same time Bardenheuer sutured a single ureter into the gut, but, while the animals recovered from the operation, autopsy revealed contraction of the ureter and hydronephrosis in each case

Novaro reported to the Italian Surgical Society in 1887, that he had produced an anastomosis of both ureters with the intestine in three dogs Two of the animals died, the third recovered and was killed thirty days after the operation, but no bacteriologic examination of the pelves of the kidneys or of the ureters was recorded

The work of such experimenters as Tuffier, Van Hook, Chaput Martin, Paoli and Busuchi Harvey Reed, and others who have studied the feasibility of ureteral implantation into the bowel many times and in a great variety of ways, has met with only a limited and qualified success Their results being no better than those of their predecessors, the animals dying from either peritonitis, pyelonephritis or hydronephrosis In this somewhat hasty review I must not pass over the recent work of Peterson and Connell, Fellows of this Society

Knowing what a dismal failure bilateral ureteral implantation was I nevertheless tried similar experiments which I report to-night and although unsuccessful led me to commence anew with the purpose of preserving the trigonum which resulted in the operation of vesicorectal anastomosis

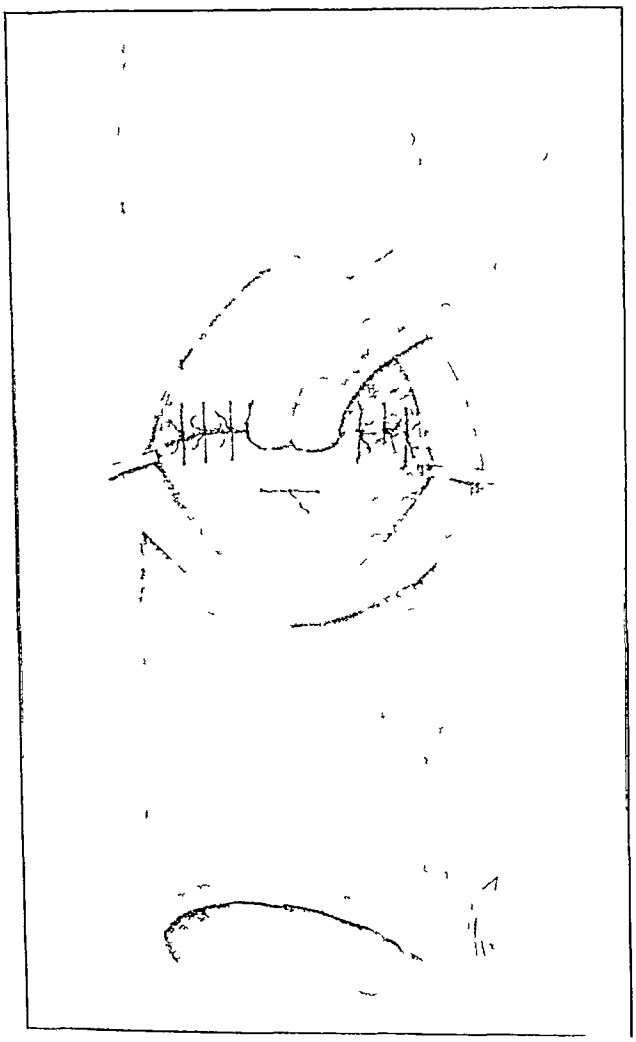

Figure 2

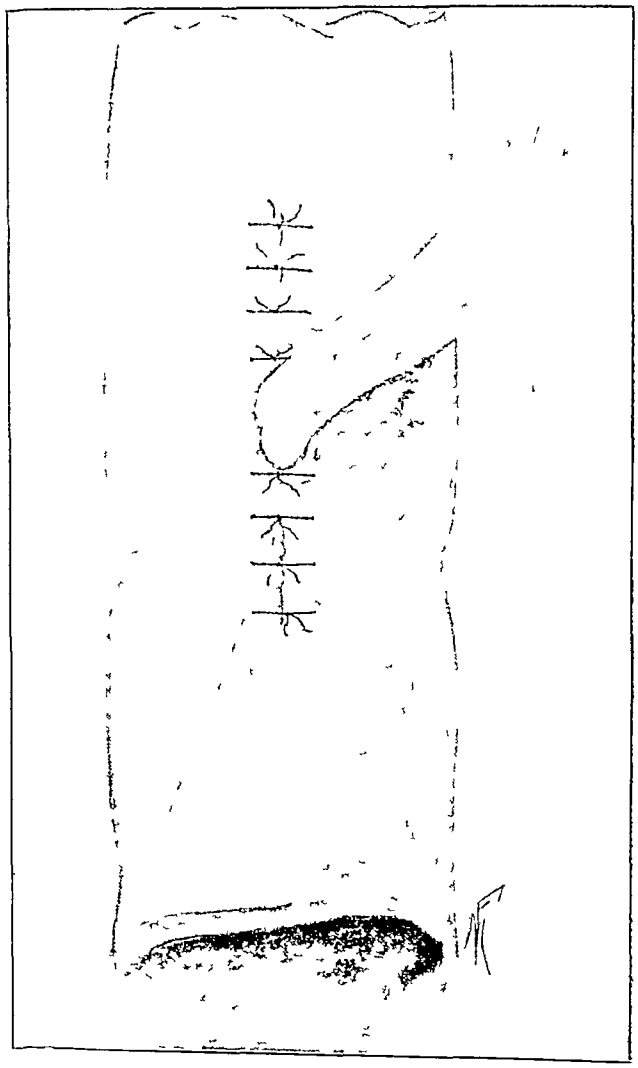

Figure 3

The method I have employed experimentally is as follows After shaving and cleansing the abdomen, it is opened in the usual way (Fig 1) The part of bowel to receive the ureters is picked up and isolated, and a longitudinal incision about an inch and a half or two inches is made through the peritoneal coat, which is then loosened up and retracted Through the remaining coats an incision is now made, about three-quarters of an inch in length, three-eighths of an inch on each side of the center of the mid-line The cystic ends of the ureters are severed and then held together by a silk suture A needle armed with fine silk is passed from without inward through all the coats of the intestine, with the exception of the peritoneal, about a quarter of an inch below the lower angle of the incision, and then emerges through the opening Now pass the needle through the cut ends of the ureters, and then cause it to pass out through the intestinal wall the same distance from the incision that it entered The ureters are now grasped in the loop of silk and the ends are tied tightly together drawing the ureters into position and holding them there permanently (Fig 2) The intestinal wound in the muscularis and mucosa is now sutured transversely, care being taken not to compress the ureters (Fig 3) The operation is completed by closing the peritoneal incision In this way sutures which have entered the lumen of the bowel are covered over by peritoneum and the great risk of infec-

tion of this structure obviated Again, the two rows of sutures do not overlie one another, and thus give more security and prevent leakage

The series consisted of ten experiments, in four, both ureters were implanted in the rectum, simultaneously, and in two, a single ureteral implantation done, while in the remaining four a single ureter was implanted and subsequently the other As it is not necessary to detail each experiment I have taken one case from each series, which I believe will be sufficient to demonstrate the procedure Of four dogs in which both ureters were implanted in the rectum simultaneously, all died Death took place within three days from a localized peritonitis, and nephritis The following is a detailed account of one case

EXPERIMENT No 2—A bitch, weighing 55 pounds was operated on Sept 1 1898, and found dead September 3 The method, as already described, was carried out for both ureters, with the usual antiseptic precautions At the postmortem the following technique was conducted and carried out, and in the same manner for all the experiments The kidneys were freed from the surrounding connective tissue, and a heated platinum loop introduced into the pelvis, and cultures made The ureters were then dissected free, and the kidneys, ureters and that part of the bowel used for implantation removed *en masse* The tissues taken for microscopic examination were embedded in paraffin, and sections stained with hematoxylin and eosin by Gram's method, and with alkaline methyl blue, followed by washing in acetic acid water

The sections from the different kidneys were made after the latter had been in Kayserling's preserving fluid No 3 or in a modification of it for a little over two years It appears that the nuclear staining properties of the tissues had not been affected materially while on the other hand some of the recent inflammatory foci show only a very few bacteria From this fact, there is a suspicion that the bacteria had suffered in their staining properties, and so all do not appear on examination

At the autopsy the omentum was found adherent to the site of incision, to the surrounding bowel, and to the site of operation The right ureter was congested at the lower one fourth of its extent, and midway between the implanted end and the kidney a narrow band was found constricting it The implanted end of the ureter was found projecting into the lumen of the intestine, but the incised peritoneum of bowel was not united and showed a collection of offensive pus The right kidney was slightly enlarged, and on cut section showed an active venous congestion The cortical markings were distinct and the pelvis filled with pus and urine

The left ureter appeared normal, but the implanted end was not firmly adherent to the bowel The kidney was normal in all particulars Microscopic examination showed a congestion of vessels in the right kidney, with slight parenchymatous changes, consisting of cloudy swelling of the epithelium lining the tubules, and Bowman's capsule There were found a few small interstitial foci of round cell infiltration The kidney was invaded by quite a number of cocci and bacilli The changes found in the left kidney were identical with those of the right, but the bacterial invasion was very mild

Of two dogs in which a single ureter was implanted in the rectum, both lived One dog was allowed to live sixteen days before being killed, the other thirty-six The latter case is briefly reported in the following

EXPERIMENT No 6—A young bitch was operated on Sept 21, 1898, and killed November 27, the right ureter having been implanted in the rectum The animal was well nourished, in perfect health, and very playful and lively before the chloroform killing At the postmortem the omentum was slightly adherent to the line of incision The right kidney was contracted to about one fifth the size of the left The right ureter was of the same size as that of the left The left kidney was enlarged to five times that of left but otherwise appeared normal The left ureter was normal in all particulars The patency of the ureteral canal was demonstrated by injecting it with water from a syringe The rectum was laid open and the mucous membrane was found paler than normal, and the union between the rectum and ureter so perfect that it was impossible to tell at a glance where the ureter ended and mucous membrane of bowel commenced Microscopic examination of the right kidney showed marked interstitial changes There was found thickening of Bowman's capsule by newly formed interstitial connective tissue, and atrophy of the uriniferous tubules, while some contained hyaline material In some areas there were evidences of acute inflammatory foci of round cell infiltration Bacterial invasion by cocci and bacilli was demonstrable The left kidney showed slight parenchymatous changes and dilatation of Bowman's capsule There was very little, if any, evidence of bacterial invasion The test tubes inoculated from the pelvis of the right kidney developed a growth consisting of a coccus, probably the staphylococcus pyogenes albus

In the last series of dogs operated on, which includes first, a unilateral ureteral implantation, followed in forty-two and three days respectively by bilateral implantation, both dogs died, the first within five days and the second within thirteen days This last series is illustrated in the following case

EXPERIMENTS Nos 1 AND 7—A bitch, weight 50 pounds was operated on Aug 17, 1898, and the left ureter implanted in the rectum On September 28, the right ureter was implanted and the dog died on October 3 The autopsy revealed the following A few stitch hole abscesses in the abdominal parietes and omentum adherent to the old scar, and to a loop of intestine The left kidney was much engorged and somewhat enlarged The capsule stripped easily, and on cut section the pelvis contained about four drams of pus The ureter was curled upon itself like the letter "S," and greatly enlarged The distance from the pelvis to the seat of implantation before loosening the adhesions was about two inches, which, however measures seven inches after freeing the ureter The union at the site of implantation was perfect, and the mucous membrane of bowel on cut section showed it to be smooth and the rugæ absent The orifice of the ureter appeared as a dimple The ureteral canal was found patent by injecting water into it from a syringe

The right kidney was slightly enlarged and congested, and its capsule somewhat adherent The ureter was in a straight line, but dilated About thirty drops of pus were found in the pelvis At the site of implantation the sutures were still *in situ*, and no leakage demonstrated under hydraulic pressure The ureter was loose in the bowel, and the orifice dilated There was a marked congestion of the blood vessels and a moderate degree of parenchymatous change in the left kidney upon microscopic examination Extensive areas showed cloudy swelling of the epithelium lining the uriniferous tubules, and the lumen of many tubules contained granular debris In various places were found interstitial foci of inflammatory round cell infiltration These were demonstrable mostly in the neighborhood of the pelvis, but some were found also in the cortex and extending as far as the region of the capsule Cocci and bacilli in a moderate degree were seen

Both the parenchymatous and interstitial changes were perhaps more marked in the right than in the left kidney Particularly was this true of the interstitial changes, which in some places had led to the formation of tracts of connective tissue, and a resulting atrophy of the tubules These changes were so marked that they gave the impression of having existed some time before the first operation was performed The bacterial invasion was more marked than that of the left kidney

From a consideration of the above experiments, we can conclude that 1, the technique is all that can be wished for, 2, bilateral implantation into the rectum simultaneously is primarily and remotely an extremely dangerous procedure, and can have no favorite place in human surgery, 3, while no single permanent implantation of the ureter into the rectum has demonstrated an abscence of inflammatory reaction on the part of the kidneys, nevertheless I am of the opinion that it must be regarded as justifiable where other means fail, and has a limited place in pelvic surgery, 4, while stricture did not take place we can not say with confidence that scar contraction at the opening into the rectum will not in months or years produce one, 5, that the rectum will tolerate the presence of urine can not be doubted by any one, and has been proved by many experimenters

In order to overcome the difficulties of strictuning and ascending infection, Tuffier and Maydl, each claiming priority, proposed and carried out the implantation

of the ureter by preserving the valve-like folds of cystic mucous membrane at the mouths of the ureters and so protecting the kidney against infection As long as the ureter is permeable and its sphincter functionating, so long is the kidney protected This fact was proved to my satisfaction in the experimental work on vesico-rectal anastomosis

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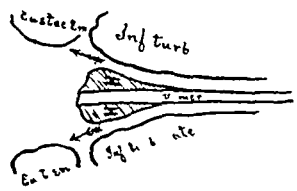
AN OVERLOOKED NASAL FACTOR IN EAR DISEASE

CHEVALIER JACKSON, M D
PITTSBURG PA

In a considerable research of the literature bearing on nasal conditions causative of ear diseases, the writer failed to find mention of what seemed to him a condition ranking second only to stenosis as a factor, and in a discussion of the indications for intranasal treatment of ear diseases by members of the Section of Laryngology and Otology of the British Medical Association last year, no mention was made of it, though the subject was fully discussed by the leading nose and throat surgeons of Great Britain The condition referred to will be comprehended by a glance at the diagrams It consists in the often observed hypertrophic thickenings on, usually both sides of the vomer near the posterior free margin, which deflect the inrushing blast of dust-laden, dry, cold air against the Eustachian eminences, resulting in perpetual irritation of the mucous membrane in the vicinity of the tube mouths This action is entirely independent of any harm such hypertrophies may do in increasing stenosis These growths are usually soft, though only slightly erectile They have been present in 25 per cent of the writer's private ear cases, and in 11 per cent of dispensary nose and throat cases Like the anterior spurs—which however, are soft only at first—they are produced by the vascular stasis resulting from pressure against the membrane covering the vomer by the hypertrophied, relaxed or swollen turbinals, usually the inferior The anterior edge of the hypertrophies is moulded to the shape of the turbinal and thins down to the level of the membrane anteriorly This tell-tale shape fixes the blame on many an innocent-looking turbinal which, at the time of rhinoscopy, is little more than normal size, though during sleep, when on the pillow side, it can fill and press to an unsuspected extent Once these vomerine hypertrophies are started they are doubtless helped along by the irritation due to the part they take in bearing the brunt of the blast Normally the inspired air deposits suspended particles in three places before it reaches the larynx First, on entering the nose the current passes upward and strikes against the anterior inferior portion of the septum and the anterior end of the middle turbinal To the moist surface of these a portion of the dust adheres Thence the air-current is deflected and strikes the posterior pharyngeal wall These three situations are sites of especial irritation and in a city like Pittsburg, where dust is black and sooty patients, especially those whose secretions are thick and perverted or who lack abundant serous secretion will come in with these sites painted black Where the air strikes the lower anterior surface of the septum the continual irritation of the not yet filtered warmed or moistened air produces crusts, ulceration and perforation, being perhaps aided by the finger-nail with which the crusts are removed Nature has placed the Eustachian eminence behind the turbinal projection out of the way of the blast of inspiratory air, but when abnormal conditions raise up these air-deflecting hypertrophies, the blast strikes in a place not normally intended so to serve, i e, the vicinity of the tube mouths instead of the posterior pharyngeal wall Even this normal location, like those in the anterior portion of the nose, can not always withstand the irritation In the dust-laden atmosphere of modern civilization almost every one with nasal breathing has an irritated posterior pharyngeal wall It is not surprising then that the vicinity of the tube mouths should be congested when the vomerine hypertrophies deflect the air-current against them To prove experimentally that thickenings in this situation do so deflect the air-current, the head of a cadaver was sawn through vertically in transverse section passing downward close to the posterior pharyngeal wall The membrane was dissected from the free edge of the vomer forward about three-eighths of an inch, stuffed underneath with cotton and sewed up, moulding the parts to imitate the shape of the well-known thickenings we often see in this situation The head was brought together again and the saw cut in the nasopharyngeal region pressed together so as not to leak air with the finger passed through the mouth, after which the lips were sewn together Powdered magnesium carbonate was then sifted down in the front of the nose while air was drawn in through the nose by a large veterinary syringe fitted



to the trachea On opening the head again large deposits of the white powder were found all over the tubal eminences and their vicinity, the heaviest coating being on the anterior aspect of the Eustachian eminence, at a point not usually visible by posterior rhinoscopy in the living subject

It is not claimed that these thickenings are present in all cases of ear disease, nor is it claimed that ear or tubal troubles are present in every case with these thickenings Not every case of nasal stenosis has ear trouble, nor does every case of adenoids Every morbid etiologic factor has its inoperative instances What is urged, however, is that where ear diseases coexist with the vomerine hypertrophies, the latter, however small, should be completely removed It is also urged that the slightest thickening on the vomer be reduced when not associated with ear trouble, lest the latter follow It is urged also that it is worse than useless to remove posterior inferior turbinal enlargements and leave thickenings on the vomer, even though there be full and free nasal respiration In one case, a mill-hand posterior enlargements had been removed from both inferior turbinals, completely relieving nasal stenosis, yet the attacks of tubo-tympanic catarrh grew more severe and more frequent The vicinity of the tube mouths was seen to be spattered with soot, dust and foreign particles Large white, soft, vomerine hypertrophies were visible on posterior rhinoscopy as well as on inspection through the anterior nares These were removed with Bryan's ethmoid curette and complete cure of the tubal and aural trouble resulted without any other treatment whatsoever Nearly two years have elapsed and though

exposed to the same dusty occupation, there has been no trouble with ear or tube This case is typical of a number, all of which were made worse by removing posterior hypertrophies on the turbinals while leaving those on the vomer to deflect the irritating blast of inspiratory air all the more readily for the turbinal being out of the way It is useless to cover pages with details and tables, hearing distance before and after, etc

A résumé follows Of the ear cases associated with these vomerine hypertrophies 42 per cent were sclerotic, 38 per cent moist catarrhal, 20 per cent suppurative In only thirty-four cases was the effect of all other treatment excluded Of these, 50 per cent of the sclerotic, 71 per cent of the moist and 13 per cent of the suppurative cases were benefited by the removal of the growths

As to treatment, there can be but one indication Take off the air-deflecting projection and let the inspiratory blast go back and strike against the posterior pharyngeal wall as Nature intended Afterward—not before—take off enough of the posterior turbinal hypertrophy to relieve stenosis and prevent reproduction of vomerine growths, but not enough to expose the Eustachian eminence to the direct blast of the inspiratory current It might be supposed that, as these growths result from turbinal pressure, after the removal of the turbinal hypertrophies those on the vomer would disappear themselves Such is not the case because of the irritation kept up by the striking against them of the blast which they deflect As to method of removing these vomerine soft growths, the writer[1] at first used the galvanocautery either through the anterior nares or through the mouth with a curved electrode, but in later years he has abandoned the galvanocautery for this and every other purpose except angioma Either Bryan's ethmoid curette, or Seiss's curette, or a long-shanked probe-pointed tenotome will do the work better A bony spur near the posterior edge of the vomer, that seemed to be acting in the way described was removed with the saw, resulting in a cessation of recurrent "gatherings" in a post-suppurative case

COMPOUND FRACTURE OF OLECRANON WITH DISLOCATION OF BOTH BONES OF FOREARM

B N TORREY, M D
CRESTON, IOWA

The patient was a well developed, muscular laboring man, 59 years of age, weighing 180 pounds The dislocation was well marked, the heads of both bones were resting on the anterior surface of the humerus above the condyles, and the lower extremity with the olecranon in position was very prominent This compound injury was produced by throwing the arm up, to shield the face from the kick of a horse, and while in this position—flexed at right angles, and the muscles taut—the full force of the blow was received on the ulna, about 2 or 2½ inches from the tip of the olecranon, producing a compound, oblique fracture, including about one-third of the articular surface of the head of the ulna, and the line of fracture extending to a point about 2 inches forward on the posterior surface Reduction was accomplished by holding the arm at a right angle, while traction was made by means of a towel around the forearm, as near the joint as possible After cleaning the wound carefully, and dressing it antiseptically, the arm was placed in a right-angle posterior splint, with a pad over the anterior and upper portion of the forearm, with the hope the fragments could be retained in their proper position But the strong, excited brachialis anticus with its attachment to the coronoid process, having a direct tendency to displacement forward, and the insertion of the powerful triceps to the point of the olecranon with the leverage supplied by the trochlear surface, carrying the lower point backward, made it impossible to keep them in proper relation (as is well shown in Skiagraph 1, which was taken the next day, while the arm was still in the first dressing)

The surgical recommendation for restoring the fragments in these cases is to extend the arm to such a degree that the force of the contracting muscles will be against the articular surfaces of the joint In this case, however, extension did not accomplish the purpose, and I believe its failure was due to the line of fracture

FIGURE 1

through the articular surface of the ulna being anterior to the center of the trochlear surface when in an extended position, thus permitting it to slip forward As the treatment thus far had not proved satisfactory, the patient was placed under an anesthetic, and the opening into the soft parts enlarged A common wood screw was secured, 1½ inches long, over which a ferrule was slipped, the ferrule being too small to let the head through, and about ½ inch long (in order to keep the head of the screw outside of the soft parts) A hole was drilled through the upper fragment, large enough to allow the screw to slip through, and not the ferrule, a smaller hole being drilled into the lower fragment so that the screw-threads would catch By tightening the screw, the fragments were drawn together as represented by Skiagraph 2, which was taken two days after the operation No 3 shows the condition twenty-eight days afterward, at the time the screw came out It was suggested, at the time of operation that a conical screw, which could be tightened as it became loose, would be an improvement over the one used But my opinion is

1 N Y Med Jour, Nov 12, 1892

that if the fragments have been in apposition for twenty-eight days we have accomplished all that could be expected in the majority of cases By referring again to Skiagraph 3 it will be seen that the union has taken place through the larger portion of the original separation and a small point of the upper fragment has broken down For the first three weeks there was a profuse discharge of serum from the joint cavity The arm and especially the tissues around the elbow were badly swollen and the least motion in the joint very painful Both after this time gradually grew better The joint proper did not become infected notwithstanding that there was slight infection of the external wound toward the last of the treatment Skiagraph 4 represents the condition found two weeks ago, and four months after the injury

It will be seen by the accompanying photographs, that he can flex the arm a little more than to a right angle and extend it to almost a normal position, and

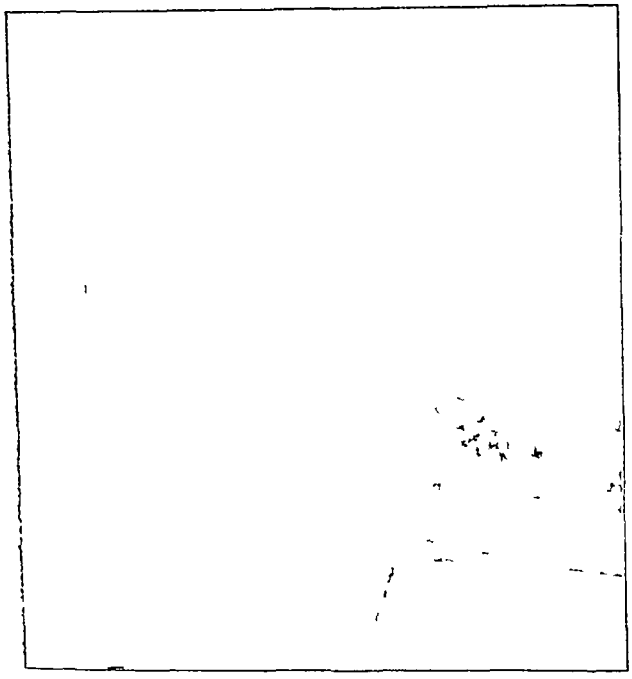


FIGURE 2

I believe, by constant use it will still improve, so it will be a very useful arm, if not functionally perfect

Dr Stimson, in his late treatise on fractures and dislocations, says "In the last one hundred years there has been less than twenty-five reported cases of anterior dislocation of the forearm on the humerus including seven cases of compound dislocations Of the seven compound dislocations, six were complicated by fractures of the olecranon Three recovered, two underwent amputation after the joint had suppurated, one died three hours after the accident (which was a fall from a height of 48 feet), and in one the result is unknown Of the three recoveries, the joint suppurated in two, the process ending in anchylosis in one of them, in the remaining, the patient recovered, apparently without suppuration—the fracture of the olecranon united by a fibrous band one centimeter long, and two and a half months after the accident the hand could be brought to the mouth and the elbow extended to an angle of 150 degrees"

From this report and the brief and unsatisfactory history of these cases let us turn our attention to the study and consideration of the prominent features that are characteristic of this injury Why are they attended with such a large percentage of amputations if not fatalities? Why does the loss of the elbow-joint by anchylosis follow in so many of the few cases reported?

The extensive laceration of all of the tissues involved, and open joint and especially an infected wound, with statistics compiled before the days of antiseptic surgery all combine to make a bad showing for the treatment of these important cases

Why is this injury so infrequent? It is the result of mechanical forces and should be considered from a mechanical standpoint only And there must be a favorable combination as regards time of action, the amount of force and the position occupied There must be a direct and an external violence of sufficient force to fracture the olecranon at its thickest and strongest point in order to free the articular head of the ulna, and to rupture or tear from their attachments the strong

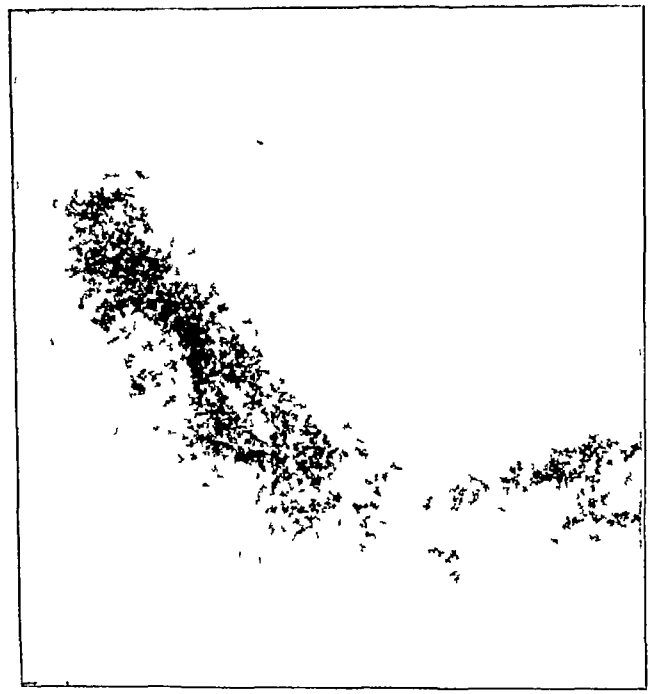


Fig 3 —Twenty eight days after operation

ligaments which support one of the strongest joints of the body And it must be a continuous force that will crowd the heads of both bones above the condyles to the point of separation The arm must be at, or very near, a right angle with the shaft of the humerus, the force in a direct line from the point of contact to the head of the humerus, and the application of the force on the ulna must be within a certain radius, starting from a point corresponding to the anterior surface of the condyles, and extending down the ulna only to the point where the leverage of the hand and arm would be as great, or greater than the resistance of the joint tissues If below this point, the amount of violence would fracture the bones, if the applied force be above this radius, there would be a compound, or a compound comminuted fracture of the olecranon, and possibly an injury of the condyles, or by transmission to the frail bones covering the shoulder-joint, but in neither case would there be luxation of the elbow-joint Therefore, in the opinion of the writer, the infrequency of this accident is due entirely to the fact that there must be the position, the requisite amount of force and the resistance, and they

must bear a certain relation one to the other, and at the same time, in order to produce the result, and such a combination would seldom happen

The failure to reduce the fragments by the means recommended, illustrates a fact which every progressive surgeon should remember, that, generally speaking

Fig 4—Four months after injury

every case has its peculiarities, and can not always be treated according to the rules laid down in surgery It would be unreasonable, and often poor, surgery to treat all cases as the one reported, the means best adapted are those which accomplish the desired results

For the skiagraphs illustrating this case, I am under obligations to Dr Sampson

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TUBERCULAR DISEASE OF THE KNEE-JOINT AND HIP-JOINT IN CHILDREN DIAGNOSIS AND TREATMENT *

EDWARD A TRACY, M D
BOSTON, MASS

The importance to the practitioner of a practical knowledge of joint diseases in children is becoming generally recognized A sign-post of the times is the making of the orthopedic course obligatory to the medical students of Harvard University The majority of orthopedic cases, and the most important ones, are met with in children In recent years it is rare to see incurable cases that formerly were common, the cases that exemplify the terrible pathologic conditions that can be produced by tubercular joints, untreated or badly treated And this is so because these diseases are recognized in their incipiency and in every large city there are ways and means established that bring the proper treatment of such cases within the reach of the poor This general leavening of the profession, as it may be termed, with orthopedic knowledge, is the work, in our country, of Henry G Davis, Lewis A Sayre, Virgil P Gibney, Edward H Bradford, and others

To John Hilton of England is the English-speaking world indebted for the earliest authoritative instruction in the curability of tubercular diseases of the joints His work[1] on "The Therapeutic Influence of Rest, and the Diagnostic Value of Pain," will remain a monument to the achievements of that brilliant practitioner There is no better book than it to serve as a general introduction to practical orthopedics, or that part of the science which is really necessary for the general practitioner

The general practitioner should be able to diagnose a case of tuberculosis of the spine, of the hip, or of the knee Tuberculosis of these parts are by far the most important and frequent of tubercular joint cases In children, if each case is examined systematically, the diagnosis is easy, in the majority of cases While few will controvert the assertion that the general practitioner ought to be qualified to make a diagnosis in these tubercular joint cases, probably many will think that the treatment of such cases belongs rather to the specialist This opinion, erroneous I believe has a justification in the vast array of apparatus devised by specialists to treat similar conditions—apparatus sometimes of such complexity that the construction and application are only understood by the inventors But are any better results attained to-day with the use of these complexities than John Hilton got twenty-five years ago with his simple means and sound sense? In the science of orthopedics there are the principles and there is the art The principles change but little, they are the rules of practice based upon the large experience of the masters The art is ever changing The art is the use and application of materials to put the principles of the science into practice For example, one of the principles in the science of surgery is to give rest to an injured joint The use and application of materials to attain this end, rest for the joint, exemplifies the art There are many ways of giving a joint rest For a concrete example take the knee-joint Reclining in bed will sometimes give rest to the joint When inflammation is present it is entirely inadequate Then some sort of mechanical appliance is necessary One surgeon will employ an old-fashioned ham-splint, padded, and consider that it produces sufficient fixation to give rest to the joint Another will apply a silicate bandage—over cotton batting—another a plaster-of-paris bandage similarly, another a gutter metal, or a gutter plaster splint, another will mold a splint from leather, and still another will apply wood-plastic material All employ the art of surgery This art is ever changing The discoveries constantly being made in the physical sciences are quickly impressed into the service of the progressive surgeon, and surgical art to-day is not the art of surgery practiced and taught five years ago After these somewhat discursive remarks, the subject of the diagnosis and treatment of incipient tubercular knee-joint and hip-joint disease will be considered from the standpoint of the general practitioner

TUBERCULAR DISEASE OF THE KNEE-JOINT

Diagnosis—Before treating of the diagnosis of tubercular knee-joint disease a word may be said of the etiology of tubercular joint disease in general Hilton, in his lectures, states "I believe that the diseases of the joints are almost invariably the results of local injury, and that if they were recognized early, and treated by appropriate rest, nearly all of them would get well" This opinion of Hilton, concerning its etiology, based on clinical experience, is confirmed by Max Schuller, who proved experimentally in animals infected with tubercle bacilli, that a slight traumatism to a joint would determine localization, by way of the circulation, to the injured part, and that a tubercular synovitis or panarthritis would follow The primal cause of tubercular joint disease is the bacillus tuberculosis already in the system of the patient, the proximate cause is often a slight injury causing a destructive

* Read by title, in the Section on Diseases of Children, at the Fifty first Annual Meeting of the American Medical Association, held at Atlantic City, N J, June 5 8, 1900

1 Published about 1862

localization of the germs in the joint tissues The history of the patient is therefore of importance in making a diagnosis Has there been, or is there tuberculosis of the respiratory alimentary, or lymphatic systems? Has there been trauma? The first question is the more important of the two The chief diagnostic signs of tubercular knee-joint disease are limitation of motion causing lameness an early sign, enlargement of the joint measurements in some cases caused by fluid distending the joint capsule in others caused by a thickening of the synovial membrane and peri-articular tissues tenderness on pressure deep seated in some parts or other of the joint is invariably present Muscular spasm elicited by attempting passive motion of more or less extent Fixation of the flexed joint from constant muscular spasm is seen early in acute cases This, untreated results in subluxation of the joint sometimes as early as the sixth month In acute cases heat in the joint felt by placing the hand upon it, is a prominent clinical feature In the slow insidious form heat is sometimes absent The older name of the disease—tumor albus—signifies a clinical feature in the more chronic form of the disease The whiteness of the skin is caused in these cases, by its distension by the swollen tissues underneath producing in the skin anemia, and therefore pallor A feature of the chronic disease a filling out of the popliteal hollow, has been noted so far as I am aware, by one surgeon only, viz Colles, of Dublin who taught half a century before orthopedics became a specialty Some cases of tubercular synovitis are so acute as to simulate traumatic synovitis, inflammation of the joint caused by injury, and lacking the tubercular elements The majority of cases are, however, of an insidious nature, so that not rarely do we meet with the disease thoroughly developed and a diagnosis very easy—such cases having had no medical treatment and attributed not seldom to "growing pains" by the wiseacres of the neighborhood, until deformity compels bringing the case to medical attention

Treatment—The treatment of incipient tuberculosis of the knee-joint is rest and protection for the diseased joint, and thorough constitutional treatment Joint rest is to be had by immobilizing the joint This is not attained by the methods commonly employed Bradford and Lovett, writing upon fixation of the knee-joint, state "Fixation by stiff bandages is an efficient method of treatment when the bandages are properly applied They should reach from the groin to the ankle, and as firmly as possible grasp the muscles of the limb Plaster-of-paris splints are made by the application of crinolin gauze bandages impregnated with finely divided plaster The limb is first wound with short wadding and then the plaster rollers applied The method does not give in all cases a certain definite support Dr Judson says, in regard to it 'It may be an exaggeration, but it conveys the idea, to say that a plaster-of-paris or silicate splint, applied to the leg or thigh contains a mass of jelly in which the femur is but little restrained from motion' and in a degree this is true of all stiff bandages" The above statement would be more exact if it said that plaster-of-paris, applied over a limb swathed in cotton batting, as it directs, *never* gives fixation Absolute fixation of the knee-joint is easily obtained by bandaging on the limb splints molded upon it, and made from wood-plastic material This material is applied directly next the skin, and there is no padding whatever to impair its fixation properties (See article in the *Boston Med and Surg Jour*, Aug 31, 1899, entitled "A Safe and Quick Method of Joint and Bone Fixation")

The wood-plastic material, when suitably cut and moistened with water can be molded and bandaged upon the limb, producing immediate fixation

Besides fixation of the joint protection for it is necessary, i e the joint should not be allowed to bear weight Rest in bed would solve the protection problem, but such recumbency would violate what has been set down as an essential, the constitutional treatment This treatment requires that the patient be out in the fresh air and sunshine as much as possible Therefore, only in cases of double knee-joint disease is recumbency to be considered and even in these cases, a box-cart can be easily constructed that will enable the child to get fresh air and amusement without inconvenience

There are two methods of giving protection to the knee-joint during locomotion One is the use of crutches, the other the use of a Thomas knee-splint In both methods a raised-sole shoe is used on the foot of the sound limb to raise the patient so that the diseased limb will not reach the ground Children over 6 years of age can generally get along with the use of crutches Younger children do better with the Thomas splint This well-known contrivance transmits the body weight from a collar encircling the groin, to a ring under the foot, by means of iron rod uprights, one on the inside the other on the outside of the limb When properly applied no weight is borne by the diseased joint in locomotion

The Thomas splint is only for protection, and not fixation It is a form of perineal crutch, and the knee should be free in it, as its position in relation to the knee must change when its crutch function comes into play Some orthopedists use it for fixation The attempt to use an apparatus that changes its relation with the knee-joint every time it bears the body weight, for fixation of the joint, shows a misappreciation of its correct value

Often when the patient is brought to us with acute tuberculosis of the knee-joint, the knee is already fixed in a flexed position We can straighten such limbs gradually or at once In the latter case an anesthetic should be given Immediately upon its reduction wood-plastic splinting can be bandaged upon the straightened limb and its corrected position maintained In case a gradual reduction be decided upon, and this is often preferable because the gentler method, the limb can be mechanically fixed with a wood-plastic splint molded upon it in the position we find the limb The correct shape of the splint-blank can be obtained by cutting a piece of paper in such fashion that it will be along the inside of the limb and embrace it from near the perineum to the ankle The splint-blank cut after this pattern is moistened with water and bandaged snugly to the limb After the joint is thus kept quiescent for ten days, upon removal of the splint, it will be found that the angle of extension of the knee can be increased several degrees The joint should be fixed in its new position, by means of a newly-molded splint, and every ten days or so the process should be repeated until the limb is straight

Constitutional Treatment—The diet is important No tea or coffee is to be given, but boiled milk, graham bread fresh meats, well-cooked greens, and fresh eggs *ad libitum*, no cakes or candies between meals, both can be allowed at meals, that is, after the substantial portion of the meal is finished, as they are then food

There must be plenty of sunshine and fresh air, and for medicine, 20 to 30 drops of beechwood creosote can be given, mixed well in a large wine-glass of sweetened water, three times a day The urine of the patient should be noted while giving this, and if it becomes dark green in color the medicine should be stopped This may have a detrimental action on the bacilli, but of its therapeutic value in joint tuberculosis I am not prepared to treat When given as directed, and its administration watched, it is harmless, if not really beneficial

It is necessary to treat tuberculosis for a period of two years, generally, the milder cases in the fairly robust get well sometimes in the short period of six months The return to the functional use of the joint must be tentative and gradual The raised-sole can be lowered and some weight be allowed to bear on the affected limb After careful watching the splints can be removed and more latitude allowed in the use of the joint Should signs of tenderness in the joint recur, fixation and protection must again be resorted to until all signs of trouble have subsided Then again a tentative use of the joint may be permitted The patient should be under further observation for a year

I have not spoken of the treatment of abscess Its occurrence in a properly treated case is very rare Should it occur, every opportunity for its absorption should be given In case it does not become absorbed and threatens opening, the thorough cleansing of the abscess cavity should be attempted and its healing brought about by the ordinary surgical procedure

DIAGNOSIS AND TREATMENT OF TUBERCULAR HIP-JOINT DISEASE

Diagnosis—The early diagnosis of hip-joint disease depends, for the most part, upon a delicate manipulation of the suspected limb and in some cases is not easy Limitation of the normal motions of the hip-joint is the chief diagnostic mark Hilton did not give this sign the prominence it merits, though he recognized it, for he states (p 344, "Rest and Pain," London, 1896) "Recently I saw a lady who was thought to have hip-joint disease on the right side I examined the hip-joint, and there was certainly nothing wrong, it might be rolled about in every direction without pain"

This limitation of motion is due to involuntary muscular spasm, caused reflexly by irritation in the joint Therefore, when examining a child its confidence must be won, so that the little one becomes passive during the examination Otherwise it will be impossible sometimes to distinguish between the voluntary and involuntary muscular action of the child The child should be examined while stripped lying upon a padded table, or upon a mattress With the child lying upon its back, the motions of flexion, adduction, abduction, and rotation of the thigh flexed at right angles to the body may be tested and compared with the same motions in the normal limb Limitation of the motion of extension is best obtained by having the child lie upon its abdomen With one hand, grasp the leg and bend the thigh upward, while the other hand rests on the sacrum to determine by its motion when the extension of the hip-bone ends and the pelvis commences to move with it Comparison should be made with the extent of extension obtainable in the other limb Any limitation of motion is pathognomonic of hip-joint disease, and the case should be treated as such

A limp in walking is another early sign of hip-joint disease It is always present, but sometimes in a degree so slight as to be hardly detected Gibney briefly gives the other signs and symptoms of incipient hip disease as follows "Change in nates, flattening for instance, loss or shortening of the ilio-femoral crease, atrophy of the limb, periarticular tenderness, night cries, the typical scream, a history of an insidious invasion, and persistence of the limp" While the diagnosis generally is easy, in some cases it is extremely difficult to differentiate a case from Pott's disease In some cases of Pott's disease, those where irritation of the psoas muscle is prominent, we have a marked limitation of the motion of extension in the hip In such cases deep palpation, with the thighs flexed, will generally demonstrate an abscess, even when quite small (Gibney) In Pott's disease there is also a lumbar rigidity—only exceptionally present with very acute hip disease Simple synovitis of the hip-joint is very rare in children, its treatment is that for early hip-joint disease—fixation

Rheumatic synovitis is rarely present in the hip-joint alone A comparatively high temperature and pulse are the differential features

Poliomyelitis rarely simulates hip disease There is pain, tenderness, and immobility of the whole limb There is a quick atrophy of it, and in the later stage of the disease no limitation of motions, but abnormal mobility in all directions

Treatment—It has not, to my knowledge, been remarked, but none the less it is the fact that the hip joint is a much smaller joint than the knee-joint, and consequently there is a smaller field for the development of disease It would appear therefore that incipient tubercular disease of the hip-joint should be at least as amenable to treatment as knee-joint disease, if not more so

The essentials of treatment for tuberculosis of the hip-joint are the same as for the like disease of the knee-joint—fixation protection, and constitutional treatment Some orthopedists add traction, but it is only necessary to reduce the deformity present in acute cases and due to spasmodic contractions of the muscles Traction applied by means of a weight and pulley attached to a bedstead raised ten inches at its lower end, is serviceable in these cases This is the simplest method of applying it As soon as the limb is straightened there is no further need of traction Fixation is then the necessary treatment

The variety of apparatus in use for the treatment of hip disease is astonishing Almost every orthopedist has a hip splint that is designed to meet the indications calling for treatment in a manner more perfect than any other It is a question, however, if any better results are secured in the treatment of the disease to-day than John Hilton obtained with his simple appliances of thirty years ago

The essential treatment is, as I have said, fixation A simple and efficient method of obtaining it will be described further on Before describing it, the opinion of Bradford and Lovett upon the plaster-of-paris method of treatment will be quoted In their book on Orthopedic Surgery (p 301 1st ed) they state "Plaster-of-paris bandages furnish an imperfect form of fixation, as they do not firmly hold the trunk above the pelvis and owing to the possible motion of the lumbar vertebræ, the pelvis is able to move within the bandage, allowing motion at the acetabulum and distortion of the limb Furthermore the method is a clumsy and uncleanly one This method of

treatment is only to be applied as a temporary measure, and is not satisfactory when continued over any length of time These writers are correct in regard to the poor fixation furnished by a plaster-of-paris bandage They omit to mention however, the chief cause for the poor fixation and that is the swathing of the limb and body in cotton batting before the application of the plaster bandages

With wood-plastic material an efficient fixation of the hip-joint can easily be produced The technique is as follows A piece of strong paper is cut so that it embraces the side of the body above the affected hip and the thigh the pattern extending from just below the axilla to the knee The posterior edge of the pattern should lie against the spine and cross over the buttock and pass along so as to lie over the inner aspect of the thigh The anterior edge should lie almost to the middle line of the body and pass over the middle third of Poupart s ligament and pass somewhat inward and along the junction of the anterior and inner aspect of the thigh This paper pattern can be laid flat upon a sheet of wood-plastic material and the correctly shaped splint-blank can be cut from it In splinting the hip a double splint-blank is advisable The two blanks can be moistened with water—not soaked—and laid together and then bandaged snugly upon the body and thigh, thus producing an efficient fixation of the hip-joint The manner of banding this splint form upon the body is important The roller should be applied first so as to embrace the body around both hips for several turns then in figure-of-8 style around the splinted thigh and body then down the thigh finally a bandage should be applied around the body and upper part of the splint

Protection is furnished the immobilized hip-joint by keeping the child s limb off the ground, as by the use of crutches and a raised shoe The constitutional treatment is the same as that already described for a patient with knee-joint disease Treatment, in an incipient case should last from one to two years The return to the normal use of the joint should be tentative and gradual, following in similar lines the plan already described in the treatment of knee-joint disease

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COUGH DUE TO REFLEX IRRITATION IN THE UPPER AIR-PASSAGES *

FRANK S MILBURY M D
BROOKLYN N Y

In the daily routine of practice, probably there is no affection more frequently met with by physicians than coughs and in many cases they are puzzling, harassing and stubborn

Even after nearly the whole range of indicated pharmacopeial medicines have been applied, the cough still remains as before, excepting with temporary relief The patient becomes alarmed fearing pulmonary complications, although assured by the physician that no lesions or symptoms exist in that region

Mayo Collier[1] says that "cough as a symptom or indication of some irritation in the upper or lower respiratory tract or other parts is the commonest affection the human frame is subject to" Such cough, however, is oftener extrapulmonary in origin and quite innocent in its nature, and a highly commendable service is rendered and the dignity and scientific value of medicine exhibited when, by thorough and accurate examination the extraneous cause is discovered, skilfully removed and the cough thereby cured A shadow of anxiety is lifted from the lives of both patient and friends, and they made happy

Very few organs of the human organism have escaped the Esculapian in his diagnosis as to the cause of reflex cough For example there are coughs known as uterine, splenic stomachic, ear and others too numerous to mention Mayer[2] quotes a case of a large plug of cotton pressing on the ear-drum for many months, causing the most violent cough Removal gave complete and permanent relief

Cough Always Reflex—Many authorities consider all involuntary coughs reflex Roe[3] says that cough is always a reflex action Although in the last decade investigation has shown to the contrary, many still maintain that cough is purely neurotic in character, while it is true that there exists a so-called nervous cough as indicated by Koch[4] in the following conclusions 1 The existence of a true nervous cough can not be denied 2 This cough, emanating from a nerve center, may be diagnosed as such when abdominal and thoracic organs are intact, when one can exclude hysteria whooping-cough and beginning phthisis 3 The monotonous involuntary cough, always the same in each patient, forms the principal symptom in this affection 4 Medication fails They are cured spontaneously by a sea voyage or a trip to the mountains

Notwithstanding many contend that neurotic coughs exist, nevertheless, are not all produced by irritation in one way or another, direct or indirect referable to the larynx, no matter from whence its source? The question may be asked How about cough in a large gathering? when one does the act, others immediately follow Is it not from the fact that the cough of one reminds others of an irritant larynx thereby causing the cough? The same principle applies to yawning, mere suggestion by seeing or knowing that another is doing it

Is not a reflex cough caused by irritation of the larynx direct or indirect? Can a cough exist without irritation? I think not Therefore I believe that all coughs are reflex According to some of the older practitioners, cough is always a disease and not a symptom, but have not modern methods and research proved the contrary, viz that it is only a symptom caused by a changed respiratory act produced by said irritation?

A long experience in the exclusive treatment of affections of the nose, throat and ear has convinced me that a large number, if not the majority, of coughs are caused by some abnormality in that section

Skilful manipulation and familiarity with reflected light and the requisite special instruments are of the highest importance These, with cocain in trained hands, will be sufficient to aid in recognizing many of the conditions in the nose, throat and ear capable of producing cough

Thompson[5] says that "there are fourteen varieties of useless coughs," and as Mayer[2] has aptly put it "These fourteen coughs must have many subdivisions of a hydra-headed nature which arise to harass the investigator" Owing to this fact, it is often difficult to discover the sources of these reflexes, but when once ferretted out, treatment is usually simple and satisfactory

I believe that Hack[6] and Seiler,[7] in the same year, were the first to call attention to the production of cough by nasal disease, but J N McKenzie[8] was the pioneer in directing attention to the great frequency of cough as a reflex from intranasal disease, and that it

* Presented to the Section on Laryngology and Otology at the Fifty first Annual Meeting of the American Medical Association held at Atlantic City N J June 5-8 1900

could also be produced by artificial irritation even when there was no apparent pathologic alteration in the nasal tissues He showed that cough could be cured by proper nasal treatment Since then, a great many have demonstrated the above facts by illustrated cases

Reflex Causes—A list of the principal reflex causes may be given as follows (Barnhill[9]) 1 In the ear, impacted cerumen, foreign body or cholesteoma 2 In the nose, hypertrophies septal spurs, polypi, foreign bodies and the crusts of atrophic rhinitis 3 In the nasopharynx, adenoids, polypi or other growths 4 In the pharynx, elongated uvula, granular pharyngitis, hypertrophy and other diseases of the tonsils And to this may be added atrophic pharyngitis and viscid mucous in pharynx 5 In the glosso-epiglottic spaces, hypertrophied lingual tonsils, varix or a too greatly curved epiglottis 6 In the larynx, presence of mucus or pus congestions and thickenings of the mucous membranes, papilloma or other growth 7 In other parts of the body, irritation of the vagi and sympathetic are the most frequent causes

The causative location of a cough is of the utmost importance A careful examination of the lungs is absolutely necessary, however much the symptoms may point to an extrapulmonary cause, after which a further examination could be performed with less prejudice Even if bronchial catarrh or bronchitis is discovered, it may be sufficient to account for the cough, but are not the diseases in themselves in the greater majority symptoms of something else, which rapidly subside when that something else is found and removed? Mayo Collier[10] says that the throat, nasal chambers postnasal space and upper larynx are in immediate and direct communication with every cranial nerve coming off from the brain or medulla oblongata, as well as the whole of the upper cervical nerves and the sympathetic "Therefore," says Collier, "it is not surprising that affections of the nasal chambers, etc, involving a suspense or curtailment of the physiological functions may and do affect and involve parts most distant For instance, a patient had suffered for two years from aphonia, and on examination, an anterior nasal obstruction was found and removed and in fourteen days, there was complete return of the voice There had not been the smallest evidence of hysteria in this case, and strong faradic currents had produced no effects

A most searching examination of the upper respiratory tract must be made Percussion and auscultation of the chest for the detection of abnormal sounds is not sufficient, for a physician may or may not find enough evidence of trouble to account for the cough The absence of any discoverable lesion in the lungs, together with the general appearance of the patient, who may or may not be robust, the family history which may be good, and the character of the cough will indicate pretty clearly that the cough is not from the chest, and should therefore be diligently and skilfully sought for in the regions most likely to be affected

The statements of the patient as to location are not usually to be relied on, although honestly given, as the point of irritation may be quite distant Recently some most excellent articles on this subject have been presented and discussed, among which may be mentioned Beverly Robinson's[11] "Enlargement of the Lingual Tonsil as a Cause of Cough," Emil Mayer's[2] "Some Unusual Causes of Cough," and Barnhill's[9] "Cough Due to Causes Outside of the Lungs"

Possibly cough produced by the reflexes from the glosso-epiglottic spaces is more frequent than from any other cause outside the lungs We must examine closely here for varicose veins or other growths, enlarged lingual tonsils in which the tip of the epiglottis may become buried or irritated by contact, or a too great curvature of the epiglottis causing its crest to come into contact with the base of the tongue, the friction thereof producing cough and a desire to clear the throat, or other reflexes not mentioned in this paper Dr Robinson has shown very clearly that this condition may exist at all ages, however not often in young children or young men, but quite frequently in young unmarried women However, after about thirty years of age, it is met with quite frequently in both sexes, but always oftener in the female

Rics[12] thinks that the reason we do not find more trouble from this condition in young children is from the fact that the epiglottis is placed so far back in young children that it is less likely to be irritated by the lingual tonsil and, in fact, it is rarely ever enlarged to any extent and, therefore, there is no compact It is true that I have seen enlargement on the base of the tongue of children as young as 2 years, but rarely until after the fourth or fifth year

Contemporary with disease of the pharyngeal and faucial tonsils a pathologic condition of the lingual tonsil is also quite common, for the reason that the chain of glands surrounding the fauces is composed of the same kind of tissue, and the influences that cause the enlargement and disease of one collection of glands will, at the same time, affect the others In a great many cases of spasmodic, persistent and even continuous cough, the cause is contact of the lingual tonsil and epiglottis, and this cough will persist notwithstanding all forms of medication have been tried, until the diseased lingual tonsil is relieved The best way to accomplish this is removal, as far as possible, by the lingual tonsillotome, and in cases where the mass is too flat, often a portion may be excised by a stiff wire snare on the curve If both of the above means fail, then we may have recourse to the galvanocautery for this and varicose veins

Roe[3] says that one of the most fruitful sources of cough above the larynx is to be found in glandular hypertrophy at the base of the tongue

About two years ago, Mrs B, 32 years of age, was referred to me by her family physician for my opinion as to the cause of her cough, which had persisted for years, often weeks at a time Her physician pronounced the lungs free from any pathologic process and this was confirmed by my examination He had treated successively her nose and rhinopharynx, but the cough continued, giving her much alarm I found a mass of hypertrophied tissue in the glosso-epiglottic space, reaching almost as high as the epiglottis, and removed it with the tonsillotome, at several sittings, resulting in complete freedom from cough ever since I might quote a number of such cases, but one illustration is sufficient

Furet[13] says reflex cough may be due to any pathologic alteration of the tonsil, owing to the involvement of the tonsillar plexus of nerves

In almost any part of the nasal passages, cough may be caused by irritation either induced or pathologic We must look out for sensitive areas, septal spurs, hypertrophic and atrophic rhinitis, both of the septum and turbinates There is, however, no unanimity of opinion as to where are situated the most frequent causes of cough However, among rhinologists, generally the consensus of opinion seems to be that the posterior ends of the inferior turbinates and that of the septum and

inner surfaces of the middle turbinated bodies and that part of the septum lying opposite, are responsible for most of the coughs from nasal causes In my practice, I have seen a few cases of severe cough from nasal hypertrophies which were cured by application of the proper treatment

An opera singer, aged 35, came under my care for hoarseness, at times so pronounced that her voice could scarcely be heard A severe cough also racked her frame, could not be accounted for and yielded only temporarily to sedatives An examination revealed a normal nares right and left excepting a large posterior hypertrophy of the inferior turbinated body pressing on the septum, middle turbinated and floor of the nose, removal of which effected a complete restitution of voice and freedom from cough and rhinopharyngitis This case indicates how slight a pathologic change may produce great trouble

Often sensitive areas are found on the convex surfaces of septal deflections and spurs, and in general hyperesthesia of the nasal mucous membrane, permitting the sympathetic ganglion to have a full and exaggerated sway

Seven years ago, a gentleman came under my care to see if he could get relief from severe asthma and cough of long duration Antispasmodics and restoratives had given him but transitory relief The whole upper air tract seemed in excellent shape, with the exception of an exceedingly hyperesthetic condition of the nasal mucous membrane, touching of this produced a most violent cough which ceased on slight cocain anesthesia The patient was simply treated with silver nitrate and the galvanocautery, with excellent results

Vasomotor rhinitis nasal polypi and the later stages of acute coryza are responsible for much cough Palmer[14] states that anatomical investigations have shown that the anterior region of the nasal cavity has a nervous connection with the larynx first through the nasal nerves, then the ophthalmic through the Gasserian ganglion to the sympathetic, through this nerve to the laryngeal and its terminal filaments On this account, many disorders are associated with distinct pharyngeal disturbances

Cough has been attributed to the dry crusts in atrophic rhinitis, but not to my knowledge has a case come to my notice

Adenoids in the pharyngeal vault and the thick, tenacious mucus in chronic nasopharyngitis is a frequent cause Pharyngitis sicca and a follicular or granular pharyngitis are responsible for this reflex cough

Elongation of the uvula coming into contact with the tongue or papillomata of it enlarged tonsils of any variety may cause cough, but those most liable to do so may be caused by enlargement and prolongation downward of folds or projections from the faucial tonsils which come into contact with the sides of the epiglottis and tongue in such a way as to cause cough by its irritating pressure

Cryptic tonsils filled with concretions and adhesions to the pharyngeal pillars, a foreign body in the larynx or any pathologic condition, as inflammation, ulceration, papilloma, etc, may give rise to most violent coughing

The conclusions arrived at by myself can not be better classified than by giving those stated by Mayer[2] A cough is reflex in its origin 1 When it is spasmodic, practically constant, without or with but little expectoration and temperature 2 When the physical signs of pulmonary disease are absent 3 When it persistently resists all medication for permanent relief 4 When the general health remains comparatively undisturbed, and 5, when upon removal of the cause it promptly ceases

Often, in conjunction with the local, general treatment as well is necessary Digestion and alimentation, and all neurotic conditions should have the most careful consideration

215 Jefferson Avenue

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Clinical Report

APPENDICITIS IN A CHILD LESS THAN TWO YEARS OLD

GEO W NEWTON, MD
CHICAGO

The history of the following case is of interest chiefly on account of the age and as illustrating the necessity of care in examining the abdomen of children in disease of the bowels When a child is too young to talk it is an easy matter to overlook the induration that might occur in a case of appendicitis

M H, aged 1 year and 11 months had been fretful and peevish for a few days before I was called to see her At the time of my first visit she was suffering from intestinal derangement, with tongue coated, stools green and on her face an ecthyma She had no temperature, but had vomited I gave her calomel and regulated the diet Three days afterward the face and tongue had improved but the stools were still green had a bad odor and she had a temperature—by the groin—of 101F, with the bowels very much distended with gas There seemed to be tenderness in the right iliac fossa, although that fact was hard to determine on account of pain on pressure However, by a careful observation, I could detect a different kind of cry when I pressed over the region of the appendix, and it was possible to detect some induration, by comparing the two sides this was found to be very marked The grandmother had noticed, in holding the baby that when the thighs were flexed upon the abdomen she seemed more comfortable and cried less This child then had the cardinal symptoms of appendicitis, viz, vomiting tenderness at McBurney's point, induration, temperature and pain She never cried as though in acute pain, but had moaned rather constantly

Although I was positive as to the diagnosis I would not advise an operation without an examination under an anesthetic, as the child's constant crying in the presence of strangers rendered a careful examination exceedingly difficult

At the West Side Hospital under an anesthetic, a tumor could be very easily mapped out and I operated Cutting into the abdominal cavity close to the induration, I walled off the intestines with iodoform gauze then separated the adhesions when a cupful of old, ill smelling pus escaped No attempt was made to find the appendix, and I packed the abscess cavity with iodoform gauze The child's temperature gradually dropped to normal she was taken home upon the fifteenth day, and one month after the operation seemed as well as she had ever been

103 State Street

Dr William Osler, at his clinic, spoke of a case in the Johns Hopkins Hospital of acute miliary tuberculosis where the diagnosis was made by lumbar puncture, an enormous number of tubercle bacilli being found in the exudate It is always mistaken for typhoid fever and this was the first case in which the diagnosis had been thus made

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THE HEMOLYMPH GLANDS

An important contribution to the study of certain, little known, but probably very important structures known as hemolymph glands is published by A S Warthin of Ann Arbor Because important problems relating to blood formation and to the pathological conditions in the blood and the blood-forming organs appear to be closely connected with these glands, it may be well to briefly review the principal facts in Warthin's article[1] The various anemias and leukemias, as well as the histogenesis of the different blood-corpuscles under normal and abnormal conditions are exceedingly obscure and poorly understood processes, so that the opening of new lines of investigation at once excites interest

It appears that H Gibbes, in 1884, was the first to describe the presence in the human subject of glands resembling lymph glands but differing from them in that they contained blood-sinuses in place of lymph spaces The glands briefly described by Gibbes were found between the renal artery and vein In 1890 Robertson gave a more detailed description of these glands and gave them their present name His studies were based chiefly on the hemolymph glands of the sheep and bullock In the sheep some 300 or 400 of the little glands are found in the prevertebral fat Clarkson, in 1891, and Gibbes in 1893, confirmed the observations of Robertson Vincent and Harrison, in 1897, noted the presence of these structures in a variety of animals, and pointed out their striking resemblance in structure to the head-kidney of certain Teleostean fishes Finally, Drummond, in 1900, reported further studies of the glands in animals Such in mere outline is the brief history of the hemolymph glands Hardly any work has been done on these organs in man Warthin's investigation includes 80 autopsies which furnished him with abundant material of both normal and pathological character If we follow him and regard "the presence of a sinus containing blood instead of lymph as the essential feature of a hemolymph gland, such glands are found to occur in greatest numbers in the prevertebral retroperitoneal region near the great vessels, near the adrenal and renal vessels, along the brim of the pelvis, in the root of the mesentery, but rarely extending far out into it, and still more rarely in the omentum and epiploica They are of rare occurrence along the thoracic vertebræ and in the mediastinal tissues, occurring more frequently in the thymus region Next to their occurrence in the retroperitoneal tissues they are found in greatest numbers in the cervical region, below and behind the lobes of the thyroid in association with the parathyroids" They vary much in size and number and they are remarkable for their abundant blood-supply Ordinarily they are recognized only with difficulty on naked-eye inspection, because the blood sinuses are empty after death When the sinuses are distended the glands may be mistaken for hemorrhages and the larger glands show red points or lines On account of their small size the number of hemolymph glands is very difficult to determine, Warthin estimates their relative proportion to ordinary glands as 1 to 20 or 1 to 50

Warthin finds that there are two distinct types namely, the splenolymph glands and the marrow-lymph glands, with an intervening series of transition forms The splenolymph glands show a subcapsular blood-sinus from which branches pass inward along the trabeculæ, separating masses of lymph adenoid tissue and empty into a central sinus In parts these sinuses are devoid of endothelial lining, so that the circulation may be described as sinusoidal The cells of the lymph-adenoid tissue are for the most part lymphocytes, but other cells, mononuclear polymorphonuclear and eosinophile also occur A varying amount of pigment is found in the reticulum, and also mononuclear phagocytes containing disintegrating red blood-cells Peculiar hyaline spherules occur, both free and within cells representing no doubt products of red cells The phagocytes are especially numerous in the central sinus The chief function of the splenolymph glands seems to be to destroy red corpuscles and to furnish new leukocytes

The marrow-lymph glands are less common and have been found only in the retroperitoneal tissue They are flattened, vary much in size, sometimes reaching a length of four to five centimeters They also contain a subcapsular, peripheral blood-sinus from which branching sinuses pass inward All sinuses are traversed by a coarse reticulum through the meshes of which red blood cells circulate Between the sinuses lie masses of lymphoid tissue, among the cells of which are giant cells of the type seen in the bone marrow Phagocytes are less numerous Warthin is not prepared to state definitely the functions of this variety of hemolymph gland, but the structure certainly points to some connection with the blood

The hemolymph glands are subject to the same general pathological processes as ordinary lymph glands In a case of pyemia Warthin found the marrow glands large, with numerous mononuclear eosinophiles and nucleated red blood-cells in the lymphoid tissue and in the sinuses, numerous dividing lymphocytes being seen In secondary anemia evidences of increased destruction of red cells were seen in the splenolymph glands In

1 Jour of Boston Soc of Med Sci, 1901, v, 414-436

a case of fatal anemia from epistaxis the retroperitoneal hemolymph glands were changed greatly and resembled much in structure the so called lymphoid marrow In an instance of splenic anemia with death after splenectomy the glands in the mesentery and retroperitoneal tissue showed changes pointing directly to compensation for the spleen In a case of hemomyelogenous leukemia the sinuses of the enlarged retroperitoneal hemolymph glands contained numerous giant-cells like those in marrow mononuclear eosinophiles myelocytes and large varieties of leukocytes as well as nucleated red cells In this case and in the case of fatal epistaxis the marrow-lymph glands appeared as lymphoid marrow Hence there seems to be a very close relation between the hemolymph glands the marrow and the spleen the glands appearing to compensate for these organs when extensively diseased Many interesting problems are suggested by Warthin's important observations, and the results of further studies will be looked for with eagerness

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THE REPORT OF THE COMMITTEE ON ORGANIZATION

At the last meeting of the AMERICAN MEDICAL ASSOCIATION, on the recommendation of the General Executive Committee two resolutions were adopted one creating a committee on the organization of the profession throughout the United States and to consist of one from each state and territorial society represented in the ASSOCIATION the other creating a committee of three to prepare plans in detail for recommendation to the large committee and to take such action in the premises in regard to a complete reorganization of the profession as it might think advisable The large committee is called to meet at St Paul on Monday, June 3 The preliminary report of the smaller committee is published in this issue of THE JOURNAL In this report the preliminary committee has outlined a plan which covers the state and its subordinate societies, to be considered by the large general committee It has also outlined a plan for the reorganization of the AMERICAN MEDICAL ASSOCIATION itself

Stripped of all verbiage the report recommends the following changes in the organic law of the AMERICAN MEDICAL ASSOCIATION 1 There is at present practically no limit to the number to which the delegate body may attain, it is recommended that the delegate body be limited to 150, and that it be given a distinctive name, viz, The House of Delegates of the AMERICAN MEDICAL ASSOCIATION 2 All affiliated state societies, and all district and local societies recognized by an affiliated state society, are now entitled to send one delegate for every ten members, it is recommended that the right to send delegates be given only to the state societies, in proportion of one for every 500 members or fraction of that number 3 Each Section shall be entitled to one representative (The Medical Department of the U S Army, the Medical Department of the U S Navy, and the U S Marine-Hospital Service are each entitled to send one representative at the present time and this right is continued)

The above practically covers the changes recommended In some respects these may seem radical although they are merely going back to the original plan on which the ASSOCIATION was founded, for, as organized, the legislative and business affairs were a function of the delegate body, this small in number and representative in character

The House of Delegates aside from the representatives from the thirteen Sections and from the three government services—sixteen in all—would therefore be created by the state societies and would be representative of the whole profession, bringing the state societies in direct touch not only with the AMERICAN MEDICAL ASSOCIATION, but with each other It would be a body in which the state societies would be federated, its functions would be the same as those now belonging to the present delegate body—neither more nor less

The Committee in its Argument has discussed every phase of the question of organization, and as the subject is an important one, this should be read, not only by every member of the AMERICAN MEDICAL ASSOCIATION, but by all who are interested in a more complete organization of the profession than at present prevails

The subject of organization is to use a common expression, "in the air " Nearly every state society which has met during the past few weeks has taken some action in regard to the matter, in each instance there being an evident desire to take up the subject in a systematic and in a business-like manner As regards the ASSOCIATION itself, there is a general feeling that a change in its methods of conducting its business affairs is very desirable And, while it is possible that every minor detail of the recommendations may not be acceptable to all, the proposed change from an unwieldy and fortuitous legislative body to a small and representative one will certainly meet with general endorsement

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THE SYMPTOMATOLOGY OF OCCLUSION OF THE MESENTERIC ARTERY

The diagnosis of abdominal disease is notoriously difficult, and often it does not extend beyond the limits of probability Avoidance of error can be hoped for only from careful observation and intelligent interpretation, together with a full appreciation of the conditions that may be present Knowledge in this direction has been enlarged in recent years by investigations especially with regard to diseases of the appendix and of the pancreas, and light has been thrown also upon the condition of occlusion of the mesenteric arteries occasionally found after death and exceptionally recognized during life The symptoms of this disorder may it has been observed, appear in two diametrically opposite forms, either with bloody diarrhea or with manifestations of intestinal obstruction

An interesting and instructive case presenting some unusual features is reported in this connection by Schnitzler[1] The patient was a woman, 55 years old, who had for years suffered from obstinate constipation and from attacks of abdominal pain, which for a period of six months had increased in intensity and acquired a colicky character There was for a time vomiting, and there was also said to have been jaundice Inasmuch as the patient urgently demanded relief, by surgical means if necessary, and as the possibility of gallstones existed, operation was undertaken but beyond the presence of biliary calculi in the gall-bladder and adhesions of the latter to adjacent intestine, nothing noteworthy was found Improvement, however, failed to take place, and death occurred six weeks later, after a mushy dark stool was passed spontaneously Postmortem examination disclosed occlusion of the mesenteric arteries, probably of some months' standing, with signs of hemorrhagic infarction The abdomen contained 500 c c of partly clotted and partly liquid blood Loops of small intestine were adherent and deeply injected and the seat of numerous hemorrhages The mucosa of these parts was swollen and discolored, and in places necrotic and ulcerated The great omentum also was the seat of numerous hemorrhages The spleen was enlarged The aorta exhibited patches of fatty degeneration of the intima The orifice of origin of the superior mesenteric artery from the aorta was narrowed and the vessel itself was firmly occluded for a distance of 1 cm by a fibrous thrombus Further on the lumen was clear The inferior mesenteric artery exhibited similar alterations The explanation of the phenomena in this case is probably that as a result of cardiac enfeeblement occlusion of the mesenteric arteries took place A collateral circulation was established, but with increasing weakness of the heart, even this failed, and hemorrhagic infarction followed, with death The abdominal pain of the last few months may be attributed to the vascular occlusion, and its periodic exacerbation is comparable with the condition described as intermittent claudication, or arteriosclerotic intermittent dysbasia, in which, as a result of narrowing of the lumen of the arteries of the lower extremities in consequence of sclerosis, the circulation may be sufficient when the patient is at rest, but becomes insufficient on attempts at locomotion with muscular weakness and possibly with pain and spasm

1 Wiener Med Woch, 1901, Nos 11, 12

TYPHOID INFECTION OF EXISTING LESIONS

Although possibly in more common employ in Great Britain than elsewhere the name enteric fever is not likely to replace that of typhoid fever, in spite of the official adoption of the former by the medical department of the British military service In the first place, the lesion of the intestine can not be considered the essential feature, though perhaps for the present it must be looked upon as the most distinctive This peculiarity of localization is perhaps contingent upon the portal of entry rather than upon any specific susceptibility of the intestinal glandular apparatus to infection with the typhoid bacillus Typhoid fever is thus not a disease of the intestine per se, as this may, in fact, escape, and, moreover the distinctive typhoid symptoms are attributable to the activity of the toxic products of the bacilli, while metastatic distribution of the latter is responsible for some of the complications

Further, the qualification "typhoid" has received universal acceptance as applicable to the specific bacillus, and it would therefore appear most appropriate to designate also the disease to which it gives rise Typhoid bacilli have occasionally been found in lesions long periods of times after attacks of typhoid fever—even many years subsequently, and recently a case has been reported by Caton and Thomas,[1] in which typhoid infection of a pre-existing lesion took place, typhoid bacilli being found in conjunction with an attack of typhoid fever in a partly calcified subdiaphragmatic abscess that had evidently been present for many years The patient was a man 30 years old, who in the sequence of an attack of typhoid fever exhibited irregular fluctuations in temperature and pulse-frequency, with some uneasiness in the left hypochondrium and the development of dulness on percussion over the base of the left lung Introduction of a trocar was followed by the escape of thick, greenish-yellow pus, and empyema being suspected rib resection was practiced and the pleural cavity exposed, but only a small quantity of clear serum was found and evacuated On palpating the diaphragm through the wound-opening a hard swelling was detected below the left costal arch, and this was found, on enlarging the wound, to be due to a large subdiaphragmatic abscess, roughly spherical in outline, with calcified walls and five inches in diameter A part of the wall was removed and the cavity irrigated, but the operation could not be completed on account of the debilitated state of the patient, and drainage was provided After the lapse of some seven weeks a secondary and more extensive operation was undertaken, from which the patient in due time made a good recovery In the pus first obtained from the abscess typhoid bacilli were found, together with broken-down pus-cells, fatty detritus and large quantities of cholesterin The bony plates forming part of the wall of the abscess were one-eighth of an inch thick The abscess was evidently of long standing, and it is thought to have represented the remains of a hydatid cyst in the left lobe of the liver which had become infected by typhoid bacilli

1 Liverpool Medico Chirurgical Jour, March 1901, p 64

MORTALITY FROM TUBERCULOSIS

According to some of the accounts of the Canadian Tuberculosis Congress, held a short time ago, the governor-general Earl Minto, is quoted as saying that tuberculosis causes one-fifth of the deaths in Canada

If this were true Canada would be in a bad way If the statement was made however the governor-general being a layman undoubtedly had his authority from some medical man and it is a fair sample of many of the reckless general utterances on this subject There is before us a recent newspaper communication from a physician in which tuberculosis is mentioned as "our most destructive disease destroying as it does one-fourth to one-third of the population and that in the best period of life Examples like these could probably be multiplied so general has become the habit of exaggeration of the mortality and contagiousness of tuberculosis A disease that causes one-seventh to one-ninth of the mortality is bad enough and a wholesome dread of it in so far as it will incite rational precautionary measures is salutary but no real good can come in the long run from misstatements that make it nearly or quite twice as fatal as it is The contagiousness of tuberculosis also is a matter in regard to which some medical authorities need to reform their morals or better inform themselves while it is a possibility and a real danger to the predisposed there is little evidence of any frequent or malignant case-to-case infection There is surely no need of educating the public into a panicky fear leading to acts that needlessly add to the hardships of those already afflicted This has been done to a certain extent and the medical profession is largely responsible In the future it would be well for all physicians to do as some have done already—to take care while describing the dangers of tuberculosis and the precautions needed against them, to use moderation in language and to so qualify their statements as to convey no exaggerated ideas Still more important than this is the need, not always duly heeded of strict adherence to fully-established facts

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FAITH HEALING HOMICIDE

Every little while the newspapers contain accounts of deaths occurring under painful circumstances of neglect in the care of Dowieites and "Christian Science" healers One of the latest is just reported almost from Dowie's Zion itself, and under circumstances that it seems possible may lead to a judicial inquiry In another case in the same city the court recently refused a Dowieite father the care of his own child suffering from severe burns, and which he wished to remove from medical care The public is gradually becoming educated as to the dangers to society and to public health that exist in the faith cures, whatever the name under which they pass, and it seems likely in time that with the arousing and enlightening of the public conscience on the subject, there will be found a way to legally prohibit human sacrifices under the pretence of religion Laws exist on our statute books that it would seem ought to effect this, if duly enforced, but heretofore they have been apparently evaded to a disreputable extent If they are not sufficiently definite to be effective against such murder they should be made so, but we believe that with a little judicial backbone and common sense they could be made efficient as they are The fault is not so much with the law as in those who have its interpretation and execution, and some judicial utterances, like that of a Milwaukee judge who could see no difference between "Christian Science" healing and merely praying for the sick are sadly lacking in a rational appreciation of the true relation of things Apropos to this question a novel and unexpected support of the antifaith cure side is announced from the humane societies It is said that they have proposed to investigate the conduct of an adherent of Mrs Eddy's church who permitted his horse to suffer and die under C S D care If they do this they will have the hearty approval of the medical profession which is never and nowhere in favor of useless suffering, even by the most humble of our fellow creatures

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SURGERY IN EXOPHTHALMIC GOITER

The dangers of surgery in exophthalmic goiter have not received as yet any large amount of attention, except as regards cases of operation undertaken on the goiter itself It is perhaps quite generally recognized that patients suffering from this disorder bear anesthetics badly and that deaths occur from thyroidectomy in this disease that are not readily accounted for by the apparent magnitude and seriousness of the operation The question of risk in other surgical operations, from the existence of this disease, is hardly touched upon in the text-books When, however, we bear in mind the general circulatory derangement, the nutritional disorders, the peculiar conditions in the nervous system generally, and particularly those of the cardiac innervation there would seem to be *a priori* reasons for particular caution before deciding on any serious operative procedures in well-marked cases of this disease These points are brought out in a recent publication by J Delprat Harris,[1] of a case of excision of a cystic tumor of the breast in a woman suffering from Graves's disease The notes given are deficient in detail, but the patient died sixty-eight hours after the operation, which was comparatively bloodless and not formidable in itself, her pulse having been uncountable for a number of hours prior to death The condition of the heart was the special embarrassment from the first, and Harris suggests that its rapid and irregular action in this disorder possibly signified thin and dilated ventricles, the anesthetic changed at once a condition of chronic compensation to one of acute embarrassment while the unavoidable loss of blood and gastric derangement prevented its being restored, and the patient consequently succumbed Hence he concludes that serious operations should be avoided in advanced cases of exophthalmic goiter, and if absolutely needed should be preceded by thorough toning up and regulating of the heart's action as far as possible If this is impossible the question of operation should be reconsidered The points he makes are worth noting, and it would be of interest to know what has been the experience of other surgeons in operating on cases of this disease for other conditions than that of the thyroid itself

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BROWN SEQUARD

In the latest of its series of articles on the "Heroes of Medicine," the *Practitioner* gives a brief appreciative

1 Brit Med Jour, May 4

biography of Brown-Séquard It is only a few years since he died and the obituaries then written have hardly yet been forgotten There are reasons, however, why his life and work can be better written now than then, and it is fitting to again restate the facts of his life and revive his memory It is not because he will be forgotten, his services to medicine were too great for that to be possible but because after the lapse of years we can do him better justice in the light of the discoveries that have been developed in the lines he first pointed out Brown-Séquard may be called the father of scientific organotherapy, and also the discoverer of the internal secretions two advances in medicine either one of which alone ought to be sufficient to give its originator undying fame It does not diminish his credit that the most valuable acquisitions in this line have been made by others since his death, or that some of his more sanguine later deductions have not been verified, he first pointed out the way and others followed It must also be remembered that he was in no way responsible for the ignorant exploitation of his misunderstood statements by quacks and by a yellow press that to a certain extent dimmed his fame in his later days Even the medical public failed to appreciate the worth of some of his findings, and has had to revise somewhat its estimates of their value He was all his life an honest and fruitful worker in science, and as the *Practitioner* says, his name will live in the history of medicine as that of one of the master builders of modern neurology It is a question, however, whether this fact will not be obscured by the greater one that to him we owe the discovery of the internal secretions and to his suggestion the practical application of the discovery to therapeutics If nothing more should ever come of this than what we now possess in the utilization of the active principles of the thyroid and suprarenal glands he would still have to be counted as one of the great benefactors of mankind A discovery so striking and suggestive as this has proved to be could hardly fail to be misused to some degree by unprincipled commercialism, but this does not lessen the glory of one who, like Brown-Séquard never himself sacrificed science for wealth or distinction

Medical News

CALIFORNIA

The board of health of Alameda has organized and elected Dr Weston O Smith, president Dr Kate P Van Orden took her seat as a member of the board

Dr Abijah T Hudson, Stockton, on the occasion of his eighty second birthday was tendered a banquet by the San Joaquin County Medical Society and was presented with an easy chair

The Oakland Board of Health held its post election meeting May 9 The new members are Drs William S Porter and Peter L Wheeler Dr Oliver D Hamlin was elected president and Dr E von Adelung, health officer

Plague caused the death of a white woman in San Francisco April 25 Notwithstanding the undoubted existence of the disease in Chinatown, the attitude of most of the local journals in denying that plague existed has caused a feeling of security in the people at large who patronize Chinese laundries, smoke Chinese cigars and wear clothing made in Chinese sweat shops

ILLINOIS

Dr N Senn has been reappointed surgeon general

Dr A B Middleton, Pontiac, has sailed for England, en route to Berlin, where he will study for six months

Dr Charles E Whiteside, Moline, expects to leave for Europe next month He will take a course of study in Heidelberg

Dr Thomas H Wagner has been appointed physician for the American Steel and Wire Company at Joliet, vice Dr J Bliss Shaw

Physicians and Pauper Practice —An agreement has been signed by every physician in Pana and published in the two daily papers By it they agree not to bid for pauper practice, and not to attend paupers at a less rate than the regular established and recognized fee bill of Pana It is also understood that no one physician shall be favored in the distribution of the pauper practice but that the patient shall have the privilege of choosing his own physician

Chicago

Dr and Mrs P M Woodworth and Mrs Nicholas Senn sailed for Europe April 18

Dr O Beverly Campbell, St Joseph, Mo, has been appointed on the gynecological staff of the Post graduate Medical School

Dr Joseph C Beck has been appointed pathologist and professor of otology in the Chicago Eye, Ear, Nose and Throat College

Alexian Brothers' Hospital was the beneficiary of a concert at the Auditorium last week, from which the net receipts were more than $6000

Michael Reese Hospital has received a donation of $25,000 from the children of Jacob and Hannah Rosenberg The money is to be used as a nucleus for a building fund

Fifth Year Medical Course —The Northwestern University Medical School, Chicago, has decided to add one year to its course for the benefit of fourth year students, and practitioners, this course to be inaugurated in October, 1901 It has been ascertained that 33 per cent of the students graduated from regular four year courses have secured at the time of graduation appointment as internes in the various hospitals The object of this additional year is to furnish to those students who have not been successful in obtaining interneships a more practical course than is compatible with the diverse routine work of the third and fourth years

Mortality of Chicago —Except for the epidemic prevalence of measles, and an increasing mortality from this cause, the public health, as measured by the number of deaths, continues remarkably good There were but 467 deaths from all causes reported last week, giving an annual rate of 13 8 per 1000 of the estimated mid year population, 1,758,026 Our recent French visitors expressed a very natural surprise at the continuous low mortality rate of Chicago in view of the dirty streets, and the dirtier comments on the city, with which they have been regaled both before and after their arrival But M Siegfried especially, who took occasion to look beneath the surface, found no difficulty in discerning the difference between the superficial dirt and litter of Chicago and the disease breeding filth of older communities, and was particularly impressed with the abundant ventilation secured by the broad streets and the alleys intersecting every block

Prevalence of Measles —Attention has before been called by the Department of Health to the unusual prevalence of measles and it desires again to emphasize the importance of this disease It is not usually regarded as a serious malady, and parents not infrequently intentionally expose their children to its contagion so that they may "take it and get through with it" Even if it were not the fact that its mortality is rarely less than 20 per cent among children under 2 years of age, and in some epidemics it is as high as 50 per cent, it is criminal folly to expose the young to any form of contagion The younger the child the less its power of vital resistance The type of the disease has materially changed during the last fortnight, it is much more severe and its death rate is increasing rapidly The causes of these changes of type in the contagious diseases are not understood, but the facts are fully recognized, as witness the scarlet fever epidemic of 1899 It would not be at all surprising if the type of the prevalent smallpox should also change and assume its usual malignity This is a good season of the year, and now while the disease is mild, is a good time to repeat vaccination

When smallpox is mild so is vaccination but both are as fully protective as if their course and symptoms were severe

IOWA

The Hospital for Waterloo is now within $1500 of being started To secure the contract $15 000 was necessary and $13 500 of the amount has been subscribed

Dr M Nelson Voldeng, Des Moines, has been appointed inspector of the county institutions where insane are kept and also private institutions

Dr Samuel W Moorhead, Keokuk has resigned the chair of materia medica and therapeutics in the Keokuk Medical College and has been succeeded by Dr Alonzo B Hughes

Mercy Hospital, Clinton, held its annual meeting May 6 and elected Dr Franklin P Batchelder president, Dr Joseph C Langan vice president and Dr Edward L Martindale, secretary Drs Batchelder David S Fairchild and George A Smith of the active staff were transferred to the consulting staff and Drs Harry R Reynolds and David S Fairchild, Jr were elected members of the active staff

KENTUCKY

Dr William W Ray Springfield has been appointed superintendent of the Western Insane Hospital at Hopkinsville vice Dr L B McCormick

Dr Minnie Dunlap has been appointed third assistant physician at the Lexington Asylum for the Insane vice Dr Louise Bergmann resigned the appointment being made by Gov Beckham

Dr Hobart Amory Hare, Philadelphia was the guest of the Medico Chirurgical Society on the evening of May 17 and delivered an address entitled The Importance of Studying the Condition of the Heart Muscle in Disease' A banquet was served after the address at which Dr J A Ouchterlony presided as toastmaster

MARYLAND

Dr John W Hebb, Sr of Howard County, was stricken with paralysis May 12

The Health Commissioner of Baltimore County, Dr T Ross Payne, reports the number of births in the county for the last six months as 447 and the deaths as 696

The Peninsula General Hospital directors have appointed Dr J McFadden Dick resident physician and accepted the resignation of Dr George W Todd as superintendent Active work on a new hospital building to cost $40 000 will begin in a few weeks

A medical board consisting of Medical Directors A A Hoehling and John C Wise and Surgeon A H C Russell has reported at the Naval Academy, Annapolis to physically examine the candidates for admission after the mental examinations are over

The fifty eighth annual report of Mount Hope Retreat for the Insane near Baltimore is out There have been 924 inmates, of whom 250 were discharged and 66 died, leaving 608 at the end of the year The percentage of recoveries of those admitted under certificates of insanity was 48 8

Baltimore

Maryland Medical College held its third annual commencement May 15, with thirty graduates

Dr Robert W Johnson sailed for Europe May 18 Dr Richard H Thomas will sail June 1 and Dr Samuel C Chew June 8

The Faculty of the Maryland Medical College has appointed Dr Claude L Holland resident physician of the National Temperance Hospital

MICHIGAN

Dr John T Main has been elected health officer of Jackson

A new medical building is to be erected for the University of Michigan The structure will cost $100,000 and plans have already been approved

The Grand Rapids Board of Health met for organization May 11, and elected Dr William A. Wilson, secretary, and Dr Mortimer E Roberts, city bacteriologist

Psychopathic Ward —The house passed a bill appropriating $50,000 for the establishment of a psychopathic ward at Ann Arbor in connection with the medical department of the state university

Medical Summer Session —The first summer session of the medical department of the University of Michigan will begin June 24, and continue through August 9 Twenty one courses in twelve subjects are offered These courses are classified as special designed for graduates and advanced students

MISSOURI

A new private hospital, to cost $45,000, is to be erected on Independence Boulevard, Kansas City

Dr David C Gore, Marshall recently appointed surgeon general of the state has declined the appointment on account of lack of time to devote to it

Women's and Children's Hospital, Kansas City, has elected the following officers Dr Avis J Smith, president, Dr Dora Greene Wilson secretary, and Dr Eliza Mitchell, treasurer

The State Board of Health met at Jefferson City, May 9, and effected permanent organization by electing Dr A W McAlester Columbia president Dr Benjamin G Dysart, Paris, vice president and Dr Winn I Morrow, Kansas City secretary

NEW YORK.

Oswego Hospital has received a donation of $2500 from Mr Orson H Brown

Albany Medical College held its commencement exercises May 1 and graduated a class of twenty seven

New York State Hospital for Care of Crippled and Deformed Children —This institution was formally opened at Tarrytown May 17 It is the first of its kind in the state, and represents a new departure in the state care, Minnesota being the only other state that has made such provision for its cripples The hospital is admirably situated, on five acres of ground sloping down to the Hudson River Dr Newton M Shaffer, New York City is surgeon in chief The managers have decided to receive only cripples between the ages of 4 and 16 years, who are absolutely unable to secure proper treatment for themselves, and whose cases hold out some prospect of a cure They must have resided in the state at least a year

Buffalo

Health Commissioner Wende has returned from Cleveland, Ohio where he went to investigate the smallpox epidemic

Buffalo's mortality for April was at the annual rate of 15 35 per 1000 Thus far, for May, the death rate has been lower 13 per 1000 The city was never in a healthier condition in its entire existence

Dr S A Knopf, of New York City, recently delivered an address on "Twentieth Century Problems of the Medical Profession in the Treatment of Tuberculosis" before the Medical Section of the Buffalo Academy of Medicine

Syphilis and Tuberculosis Among Indians —Among the Indians representing forty two different tribes, on exhibition at the Pan American Exposition, a number show well marked symptoms of syphilis or tuberculosis This fact well illustrates the causes of the rapid extinction of these people from our continent, and is to be attributed to that benevolent assimilation by the white man whereby the Indians are the recipients of much of the good but more of the vices and burdens of civilization

New York City

Dr William H Draper, recently deceased, left an estate valued at $106,000

Dr Frederick Peterson has been appointed president of the State Commission in Lunacy

Dr Louis Fischer has been appointed visiting physician to the Willard Parker and Reception Hospitals

Long Island College Hospital held its commencement exercises May 14, and graduated a class of forty one

William B O'Rourke, formerly superintendent of Bellevue Hospital, has been transferred to the superintendency of the Metropolitan Hospital on Blackwell's Island

Dr I N Love, formerly of St Louis, Mo, is now permanently located in New York City, residing at 101 West Eightieth Street His offices are at 537 Fifth Avenue, between Forty fourth and Forty fifth streets

Smallpox continues to prevail in a manner that is not reassuring Incoming steamers from Naples have brought a number of cases and investigation has shown that the disease is quite widespread in Naples The steamship companies have cabled their agents in that city to assist in preventing the shipping of infected persons

Mount Sinai Hospital—The corner stone of the New Mount Sinai Hospital was laid, with appropriate ceremonies, May 22 Dr Abraham Jacobi, Governor Odell, President Seth Low, of Columbia University, Randolph Guggenheimer and Edward Lauterbach were the speakers on the occasion The new hospital will cover the ground between Fifth and Madison avenues and One Hundred and One Hundred and First streets In this plot there will be nine separate buildings

OHIO

Dr Daniel Heimlich, Cleveland, has been appointed health officer vice Dr George F Leick

The contract for the construction of St Elizabeth's Hospital, Dayton, has been let at $157,500

Dr Henry A Tobey has been re elected superintendent of the Toledo State Hospital, for a term of four years

The corner-stone of the New Women's surgical addition to St Vincent's Hospital Cleveland, was laid with appropriate ceremonies, May 11

Township physicians are low priced in Ohio In Covington Township active competition resulted in bids being reduced from $70 to $49 and in Batavia Township, contracts were let to the lowest bidders, whose figures were $47, $35 and $25 respectively

Certificates Revoked—The State Board of Medical Registration and Examination has revoked the certificates of Dr Norman S Wright, Cleveland, charged with having used the mails for fraudulent purposes, and of Dr J H Hoyer, Cleveland convicted of committing a criminal abortion In the latter case the governor refused to interfere with the action of the board

PENNSYLVANIA

Western Pennsylvania Medical College, Pittsburg, held its commencement exercises May 23, and graduated a class of seventy one

Smallpox in Chester—On May 17 seven new cases of smallpox were reported in Chester, six in one family The board of health has ordered all school children to be vaccinated

The West Penn Hospital staff met for organization May 14 and elected Dr Thomas McCann, chairman, Dr James W MacFarlane vice chairman, Dr Ewing W Day, treasurer, and Dr Thomas S Arbuthnot, secretary all of Pittsburg

An osteopath of Beaver Falls, who was convicted of practicing medicine and surgery in Beaver County without a license has been granted a new trial on the ground that osteopathy is outside the pale of the medical law of the state

The Free Hospital for Poor Consumptives has bought 125 acres of land near White Haven on the Upper Lehigh River, as a site for a sanatorium It is believed that the state will make an appropriation of $50 000 for the erection of a building

Philadelphia

Woman's Medical College, Philadelphia, held its forty ninth annual commencement exercises, May 16, when thirty seven graduates received their degrees The address to the graduates was made by Dr Elizabeth Bundy

Jefferson Medical College held its seventy sixth annual commencement exercises May 15, when a large number of graduates received diplomas The degrees were conferred by William Potter, president of the board of trustees, and the valedictory address was delivered by Dr W W Keen

The class of 1881, of the medical department of the University of Pennsylvania is arranging for a dinner to be held on June 12, to commemorate the twentieth anniversary of its graduation The affair is in charge of a committee consisting of Drs George E de Schweinitz, W Easterly Ashton and Daniel W Nead

New Laboratory Building for the University—Within the next few days the ground will be broken for the erection of the laboratories of physiology, pharmacology, pathology, and pharmacodynamics of the University of Pennsylvania The new medical laboratories will be quadrangular in shape, two stories in height, and measure 200 by 340 feet When completed the buildings will have cost in the neighborhood of half a million dollars

Diphtheria not a Quarantinable Disease—On May 12 the American Line steamship *Rhynland* came into this port with 213 steerage passengers On board the vessel three cases of diphtheria were found, and the city health authorities were notified The patients were at once removed to the Municipal Hospital As soon as the cases were discovered an injunction was issued preventing the other passengers from leaving the vessels The federal and state quarantine officers decided to pass the vessel, and later the city government refused to hold the passengers since diphtheria was not classed as a "quarantinable disease" The names of the passengers were taken and a close surveillance will be placed over them

SOUTH DAKOTA

Dr Rodell C Warne, Mitchell has been appointed superintendent of the Davison County Board of Health

Dr William Edwards, Bowdle, has succeeded Dr Alonzo E Clough, Madison as president of the State Board of Health

Brown County Board of Health has elected Dr V P Kennedy, vice president, and Dr Hiram E McNutt, secretary, both of Aberdeen

Dr Leonard C Mead, Sioux Falls, has been elected superintendent of the South Dakota Hospital for the Insane, at Yankton, vice Dr. Ross, resigned

TEXAS

Dr Witten Booth Russ, San Antonio, has become associate editor of the *Texas Medical Journal*, Austin

The Medical Department of the University of Dallas held its commencement exercises April 18, and graduated a class of fifteen

GENERAL

The Journal of Hygiene—The first issue of a new, high class English quarterly publication, the *Journal of Hygiene*, has recently appeared It is under the editorial management of Dr H F Nuttall, of Cambridge, in conjunction with Drs J S Haldane, of Oxford and Arthur Newsholme, of Brighton The first number contains articles on the biology and distribution of Anopheles by Nuttall and several collaborators, on the "Pathogenic Microbes in Milk," by E Klein on the "Artificial Modification of Toxins," "Industrial Lead Poisoning,' etc, all of which are of high scientific worth The well known names of the editors are assurance in themselves of the class of contributions that will appear in its pages, and it should have a reception by the profession corresponding to its importance as an addition to the serials of scientific medicine

CANADA

The Smallpox Quarantine in Toronto has been raised, and the medical health officer pronounces the city clear, excepting the three cases still in the pest house, all of whom are recovering rapidly

Mr E B Osler, conservative member of parliament for Toronto West and brother of Professor Osler, has donated $1000 toward Lady Minto's cottage hospital scheme for the Canadian Northwest territories

Dr Henry W Miller, Toronto 95, has been appointed pathologist and clinical director in the Taunton Insane Hospital, Taunton, Mass, after having spent three years of special study in the other hospitals of Massachusetts

Food Adulteration—The report of the commissioner of inland revenue for 1900 deals with 16 articles of which 756 samples were tested Of these, 524 were pronounced genuine, equal to 69 per cent 186 were adulterated, equal to 24 per cent, and 46 or 6 per cent were harmful

Ban on the Cigarette—The Toronto Ministerial Association is memorializing the Dominion House of Parliament to enact legislation prohibiting the manufacture, importation and sale of the cigarette and the material for its preparation, and to make it a misdemeanor for any person under the age of 18 to be found using or having in his possession tobacco in any form

Steamship in Quarantine—Two cases of smallpox have been found among the 900 passengers on the steamship *Lake Superior*, all of whom were landed at the Grosse Isle Quarantine Station The vessel has been thoroughly disinfected and released The crew and all the passengers will remain in quarantine twenty one days The passenger list for May 17 was cancelled

Montreal Dispensary—The committee of management's report shows that the total number of applications for advice and treatment made by the sick poor during the year was 16,918 A new department, that of diseases of children, under the charge of Dr A E Vipond, has been running for the past two months, and has already a very successful clinic attached to it. The treasurer's report shows that the receipts, including a balance of $3545, were $6501 and the disbursements $2912

A Quarantine Station for Montreal —On account of complaints that have been made by persons who have been quarantined in small houses on account of outbreaks of smallpox recently in Montreal the city council is considering purchasing a house with grounds for a quarantine station Quarantine which lists for two weeks in Montreal, has just been taken off or raised from a small house where some fourteen people were confined and the sufferings they underwent through lack of exercise and other incommoding circumstances, so appealed to the city medical health officer that he has brought the matter to the attention of the hygiene committee with the result that it is to be taken up in council at an early date

Bishop s Medical College —A number of changes have recently been made in the teaching staff of the Faculty of Medicine of Bishop s College Dr I W Campbell the dean will in future give a special course of lectures in insurance law, in addition to his regular lectures in medicine and neurology As professor of medicine he will have associated with him Dr T B McConnell vice dean The chair of medicine will be further assisted by Dr W T Deeks lecturer on internal medicine, Dr A J Richer specialist in pulmonary diseases, and Dr W Grant Stewart. Dr Deeks is a new member of the staff Dr James Perrigo, professor of gynecology, will have associated with him Dr A Lapthorn Smith who remains also professor of clinical gynecology Dr J M Jack a new member of the staff will lecture on dermatology The chair of surgery is to be occupied by Dr I R England with whom will be associated as lecturers Dr T J Hackett Dr Rollo Campbell, and as instructors Dr George Fisk and Dr Herbert Tatley Another addition to the teaching staff is the appointment of Dr Louis Laberge, the city medical officer who replaces Dr Richer as lecturer in hygiene Dr W G Reilly has been appointed to the chair of anatomy

FOREIGN

Mr Frederick Treves has had conferred upon him the honor of knighthood by the King of England

The King of England has declined to continue an honorary member of the British Medical Association to which membership as Prince of Wales, he was elected in 1900

Progress of the Plague —According to the *British Medical Journal* of May 11 the plague returns for all India, during the week ending April 13, gave 8429 cases as against 11 606 the previous week In Bombay City 714 deaths occurred, and in the Bombay districts 767 The same week, in Calcutta, the deaths numbered 548, and 859 the previous week, with 358 deaths in Benares for the week ending April 13 Constantinople reports a case May 1, at Galata, and the sanitary consul in Constantinople has decided to medically inspect all passengers leaving the city by land or sea During the week ended May 2, in Mauritius 3 plague cases occurred and 2 deaths

Association News

For additional Association News see page 1510

Report of the Committee on Transportation

The Committee on Transportation of the American Medical Association regrets to say that its labors have been very much increased and the railroad rates and time limit of tickets with extension and stop off privilege greatly jeopardized by the meddlesome and persistent interference of certain persons chiefly a layman in Chicago whose action in attempting to concentrate business over a favorite line has nearly resulted in the failure on the part of your Committee, to secure a rate of one fare plus $2 for the round trip to St Paul through the Central and Western territories This interference has resulted in the Central and Western Passenger associations refusing to grant a stop off privilege at Milwaukee, Wis , to the members of the Association, many of whom are members of the American Medico-Psychological Association You have this situation before you The Transportation Committee of your Board of Trustees working in the interests of each and every member of the American Medical Association and not asking nor receiving of the railroad companies deadhead transportation for its services, while in another direction you have a layman, not a member of the Association, but assuming to speak for it and acting as an agent of a particular road, circularizing the regular profession and throwing every obstacle in the way of your Committee in its earnest endeavors to secure the best rates stop off privileges, and time extension possible for the delegates to the Association meeting Your Committee has but one object in view that is, the best possible rates for the Association, and it asks you as members, personally interested to discountenance this annual jeopardizing of your interests by commercial laymen After an almost constant correspondence since January last with the various railroad associations your Committee notwithstanding the many obstacles and interferences from the source cited, has eventually succeeded in securing a one fare plus $2 rate, with time extension to July 15, if properly applied for in the Western and Central territories and a one and one third rate for the round trip through the Trunk Lines territory, with the same time limit extension privilege Your Committee has secured a one and one third fare rate in the New England territory, and expects to be able to secure the time and extension privilege granted in the other territories In consequence of the manipulations of outsiders in opposition to your Committee, the Western Passenger Association and all others have persistently and most positively refused to permit a stop off at Milwaukee to our delegates In order to break up this unfair discrimination against our delegates by the western roads in general, and the one in particular which has loaned itself to the party opposing your Committee s efforts I have prevailed upon one of them, the Chicago, Milwaukee and St Paul Railway Company which is friendly to us and championed our wishes, to give official notice to the Western Passenger Association that it would break that territory compact, and grant a stop off at Milwaukee to our members, thereby permitting them to attend the meeting, June 11 to 14, and thus checking this unjust discrimination against us, and the members of the American Medico Psychological Association Your Committee earnestly advises the physicians to patronize on this occasion the roads which have worked in your interests, and with your duly appointed and faithful Committee, and place forever your stamp of disapproval upon the roads, methods and manipulators who discriminate against you or oppose your just and proper interests Your Committee recommends to the delegates of the New England and Eastern States as the best and most convenient route the Pennsylvania Railroad and connecting lines direct to Chicago, and from there out of Pennsylvania (Union) station, the Chicago, Milwaukee and St Paul road, will grant, on returning the stop off at Milwaukee to the delegates and others who go to the St Paul meeting over that road, and will extend the time limit to July 15, and protect the tickets returning through the various railroad association territories provided the return tickets are duly deposited with its local agent at St Paul or Milwaukee as required

H L L Johnson, M D , Chairman

The Truax Circular

Washington, D C , May 21, 1901

To the Editor —The following telegram, from Dr Chas A L Reed, was received by Dr H L E Johnson in reply to his queries as to the Truax circular, and speaks for itself

Cincinnati, Ohio, May 20

Dr H L E Johnson, Washington, D C

The Truax circular was printed and distributed before I knew of use of my name as member of committee I recognize the committee on transportation alone authorized to act for Association Chas A L Reed

H L E Johnson,
Chairman Committee on Transportation

St Paul Entertainments

General plans for the entertainment of the members of the American Medical Association, have been practically made The program furnished by the local committee is as follows Tuesday evening June 4 is to be devoted to banquets The Sections of surgery, gynecology and cutaneous diseases will dine at 8 30 at the Ryan The Merchants', at the same hour, will entertain the Sections on medicine, materia medica, therapeutics, physiology, dietetics hygiene and pathology The Section

on ophthalmology will dine at the Minnesota Club, south dining room The Sections on diseases of children and stomatology will be represented at a dinner at the Windsor, and the Section on laryngology will dine at the Minnesota Club, north dining room The Section on nervous and mental diseases will dine at the Town and Country Club Wednesday evening there will be receptions at the homes of George Thompson, Dr Charles A Wheaton, Michael Doran, Gustave Scholle and Drs A J Stone and Haldor Sneve all on Summit Avenue and a smoker will be given at the Ryan after 10 o'clock, by the state and county medical societies Thursday evening the visitors will see the state university There will be a ball in the armory and a promenade on the campus, given by physicians of Minneapolis

Program of Ladies' Entertainment Committee

From 4 to 6, Tuesday, a reception will be given by Mr and Mrs T E W Villiers Appleby, at their home, 226 Summit Avenue Wednesday, at 9 30, Mrs Charles L Greene will conduct the women by trolley to Minnehaha Falls Thursday, at 2, there will be a drive through Como Park, in charge of Mrs Archibald MacLaren Friday morning a steamboat excursion will be taken to Fort Snelling, under the direction of Mrs A J Stone Mrs George B Young is chairman of the ladies' committee on entertainment, and Dr Burnside Foster is chairman of the general committee on entertainment Friday night after the business of the convention has been finished, a special Northern Pacific train will be ready to convey the physicians to the Yellowstone National Park

An Invitation

Members of the AMERICAN MEDICAL ASSOCIATION are invited to avail themselves of the headquarters secured by the *St Paul Medical Journal* in a room adjacent to the general exhibits, during the St Paul meeting for writing, reading, smoking and general lounging

General Committee on Organization

The following physicians constitute the Committee on Organization of the medical profession of the United States

R M Cunningham, Alabama
I B Davis, Arizona
W B Laurence, Arkansas
Thomas Ross, California
I N Hall, Colorado
L B Almy, Connecticut
Willard Springer, Delaware
G W Cook Washington, D C
W L Hughlet, Florida
Samuel C Benedict, Georgia
Ed E Maxey, Idaho
Geo N Kreider, Illinois
Walker Schell, Indiana
LeRoy Long Indian Territory
R E Cundiff, Iowa
J W Porter, Kansas
Jas H Letcher, Kentucky
F W Parham Louisiana
E H Hill, Maine
J McPherson Scott, Maryland
E B Harvey, Massachusetts
A B Alvord, Michigan
Walter Courteny, Minnesota
J G Featherstone, Mississippi
U S Wright, Missouri
J W Gunn, Montana
Robert McConaughy, Nebraska
Granville P Conn, New Hampshire
W A Phillips, Nevada
J H Sloan, New Mexico
E D Ferguson, New York
G W Pressley, North Carolina
C M Keeling South Dakota
H J Rowe North Dakota
F D Bain, Ohio
R D Love, Oklahoma Territ'y
Harry Lane, Oregon
Geo W Guthrie, Pennsylvania
Geo R Dean, South Carolina
J A Crook, Tennessee
H A West, Texas
A S Bowers Utah
M R Crain Vermont
Hugh T Nelson, Virginia
Chas G Brown, Washington
A H Thayer, West Virginia
J F Pritchard, Wisconsin
Geo Johnson, Wyoming
Geo D Hersey, Rhode Island

This Committee is called to meet at the Hotel Ryan, St Paul, June 3 at 2 p m

Married.

P H SALTER, M D, to Miss Ada Butterfield, both of Norfolk, Neb, May 22

E FRANK REAMER, M D, to Miss Josie Berg, both of Minneapolis, Minn, May 15

R ALEXANDER BATE M D, Louisville, Ky, to Miss Calloway of Eminence, Ky, May 15

JOHN HAZELWOOD, M D New Albany Ind, to Miss Pearl Meder, of Louisville, Ky May 15

J EVERETT PIERPOINT, M D, Skidmore, Mo, to Miss Jessie M Bentley, of Concordia Kan, May 7

SHALER BERRY, M D, to Miss Jessie Southgate, M D, both of Newport Ky, at Hamilton, Ohio, May 7

HENRY C SMITCHER, M D Jr, Denver, Colo, to Miss Ada B Kaiper, of Cincinnati at Denver, May 1

JOSEPH JAMES CURRY M D acting assistant surgeon U S Army, to Miss Helen Hamilton, of Zanesville, Ohio, April 28

Deaths and Obituaries

Marie J Mergler M D, Woman's Medical College, Chicago 1879 died from pernicious anemia May 8, aged about 50 Dr Mergler was one of the most prominent and highly esteemed women in the profession Until her illness, she was dean of the Northwestern University Woman's Medical School, and for the past eight years she occupied the chair of gynecology in that school She was the first woman to pass the examination for interne at the Cook County Insane Asylum A few weeks ago she was obliged to leave Chicago on account of continued ill health and went to Los Angeles Cal, where she died She was a member of the Chicago Medical Society, Illinois State Medical Society Illinois State Medical Society, Mississippi Valley Medical Association and the AMERICAN MEDICAL ASSOCIATION

Andrew K Minich, M D, Jefferson Medical College Philadelphia 1870, a surgeon in the German army during the Franco Prussian War for more than twenty years visiting physician at the Episcopal Hospital, quiz master and lecturer in Jefferson Medical College for many years, and a member of the AMERICAN MEDICAL ASSOCIATION, died from cancer of the throat at his residence in Philadelphia, May 11, aged 53

Frank Crampton Hoyt, M D, University of Louisville Ky 1885 Superintendent of the Iowa Hospital for the Insane Mount Pleasant, a member of the New York Medicolegal Society, American Medico Psychological Association, Iowa State Medical Society and the AMERICAN MEDICAL ASSOCIATION died at his home in Mount Pleasant, from tuberculosis complicated with rheumatism May 21

Charles Rice, M D, for the last twenty five years chemist of the New York Charities Department and chairman of the Committee on Revision of the Pharmacopeia of the American Pharmaceutical Association died from asthma, in Bellevue Hospital, May 13, aged 65

Robert Bolling, M D, University of Pennsylvania, 1855, a student for four years thereafter in Paris, later demonstrator of anatomy under Dr D Hayes Agnew, and for more than forty years a practicing physician at Chestnut Hill, Philadelphia, died at his home in that place May 12, aged 67

Harry E Dawson M D, College of Physicians and Surgeons Baltimore, Md, 1892 and a post graduate of Johns Hopkins University, died at his home in North Scranton, Pa May 13 from rheumatism, after a protracted illness, aged 36

Eugene L Priest, M D Kentucky School of Medicine Louisville, 1876 a leader in the movement that resulted in the enactment of the Hall medical bill, died at his home in Nevada Mo, May 8 from pneumonia after a short illness, aged 51

Samuel Hanson, M D, Medical School of Maine, Brunswick, the oldest practitioner in Houlton, Maine, died at his home in that place May 7, after an invalidism of thirteen years from inflammatory rheumatism, aged 67

Frank E English M D Rush Medical College, Chicago, 1864, a pioneer physician of Polk County, Iowa, died at his home in Valley Junction, Iowa, May 8, from meningitis following la grippe, aged 60

Daniel Humphrey M D, Vermont Medical College Woodstock, 1852 the oldest practicing physician in Lawrence Mass, died at his home in that city, May 9 after an illness of three months aged 76

Thomas I Hodgkin, M D, University of Victoria Medical College, Cobourg Ont 1862 who formerly practiced at Guelph, died at his home in Deer Park Toronto, Ontario May 6 aged 84 years

James Hayes, M D, College of Physicians and Surgeons New York, 1862 an old and respected citizen of Plainfield N J died at his home in that place May 12, after an illness of two years

Alonzo P Casier, M D Albany Medical College 1880 died after an illness of fifteen years from pulmonary trouble at his residence in St Johnsville, N Y May 11, aged 56

Robert B Bell, M D, Detroit (Mich) Medical College 1898, a practitioner of Manistee Mich, died in Toronto, Ontario, from typhoid fever, May 13

William K Jones, M D, University of Pennsylvania 1856 died May 9 at his home in Montgomery Ala after a long illness aged 67

J E Patterson, M D, Jefferson Medical College Philadelphia, 1860, died at his home in Harveys Pa, May 8, after a long illness

John W Drew, M D, State University of Iowa Iowa City 1885 died at his home in Onawa, Iowa May 13 from acute gastritis

Angus Noble, M D, Jefferson Medical College Philadelphia, 1868, died at his home in Wellsville Ohio from paralysis May 7

Book Notices

Tuberculosis as a Disease of the Masses, and How to Combat It Prize Essay by S A Knopf M D, New York Paper Pp 86 Price 25c New York M Firestack 1901

This is a republication of the essay which obtained the prize offered at the International Tuberculosis Congress in Germany It was selected from among a large number of other competing essays by European authors, and this fact is not only most creditable to the author but also reflects credit on the country from which the work came The volume is intended to give to the general public such ideas regarding pulmonary tuberculosis and tuberculosis of other organs as will best enable them to resist it and ward off infection and to meet the early symptoms and predisposition in the best and most successful way From a perusal of the work it is evident that the author has met the demands, and while he points out the dangers and the precautions to be taken he also avoids the extreme statements and advices that are going the rounds so much and often on medical authority The book is a sensible as well as a scientific one It is written in such a way as to be readily intelligible by non medical readers, and we believe its circulation will do a vast amount of good It has been widely circulated in Germany and translations have been made, we understand, into a number of European languages The American edition has been somewhat modified from the German, the work as published is not exactly the same as that which appeared abroad, its differences being such as are necessitated by our laws and institutions It is profusely illustrated and handsomely gotten up by the publisher, and it will undoubtedly have, as it deserves, a wide circulation and popularity

Pulmonary Consumption, Pneumonia, and Allied Diseases of the Lungs, Their Etiology, Pathology and Treatment, with a Chapter on Physical Diagnosis By Thomas J Mays, A M M D, Professor of Diseases of the Chest in the Philadelphia Polyclinic Illustrated Cloth Pp 539 Price, $3 00 New York E B Treat & Co 1901

The views of the author of this volume have been published in various articles by him, and the present work is simply a detailed expansion of them He sums up his fundamental concepts as follows "1 That pulmonary phthisis in the large majority of cases is primarily a neurosis, and that the pulmonary disintegration is secondary 2 That any agent, influence, or condition which undermines the integrity of the nervous system will engender pulmonary phthisis, or some other form of pulmonary disorder 3 That the only remedies of value in the treatment of pulmonary phthisis are those which appeal to, and act through the nervous system 4 That of special value in the treatment of phthisis is the counter irritant action of silver nitrate introduced hypodermically over the vagi in the neck 5 That acute pneumonia, and other forms of acute pulmonary diseases are closely affiliated with disorder of the nervous system" While the majority of the profession, it is safe to say will not agree with him, the work will be found of interest and probably instructive to a great many readers The author combats vigorously the views held by some as to the extreme contagiousness of consumption, and his book may be taken in a certain sense as a special statement and plea for due consideration of the resisting powers of the organism These are being slighted, we believe, too much by many at the present day As regards the treatment by nitrate of silver introduced hypodermically in the neck, we doubt whether it will be generally practiced, or considered as worthy of being seriously taken up by most of the profession, but the essential point made that through the nervous system much can be done to increase the resistance to pulmonary disease, may be accepted as a truth to a very large extent

The Feeding of Infants Home Guide for Modifying Milk By Joseph I Winters M D, Professor of Diseases of Children Cornell University Medical College Cloth Pp 47 Price, 50c New York E P Dutton & Co 1901

There seems to be a flood of books at the present time on the feeding of infants, a worthy subject for our best efforts Winters little book is the most unpretentious of any that have come into our hands and it is nevertheless to be commended It gives a detailed account of the preparation of various infant foods and gives a formulary for the home modification of milk for infant feeding The importance of the subject is not yet fully appreciated by the public, nor by some of the profession and there are some details in regard to it in which we are yet in need of information, but this little volume seems to give a fair resumé of the facts and will be found convenient for reference It is not so strikingly medical that lay readers might not profit by its perusal

The Boudoir Companion By Flora L S Aldrich, M D Anoka, Minn Cloth Pp 127 Price, $1 00 Published by the Author 1901

The title is misleading A boudoir is a lady's—or it may be a gentleman's—private room, hence a book with such a name as the one before us might treat of manicuring or hair dressing, of how to take out wrinkles or put on the tint of youth and beauty But it has nothing to do with any of these It would have been better had it been called a companion for the wife and mother Though an unpretentious little volume, it is large enough to contain much sensible advice to and information for the pregnant woman and the mother it tells the former how to take care of herself, and the latter how to take care of her child The author has treated the subject in a conservative and sensible manner, with no pretention of making her book supplant the physician It is one of the few that the physician can conscientiously recommend to his patient who is to become a mother, for the information it gives will generally receive his endorsement

Diseases of the Nose and Throat By D Braden Kyle M D, Clinical Professor of Laryngology and Rhinology Jefferson Medical College etc, with 175 Illustrations, 23 of them in Colors Cloth Pp 646 Price, $4 00 Second Edition Philadelphia W B Saunders & Co 1900

Dr Kyle has written a book that has been accepted by the profession as one of the best on diseases of the nose and throat His new edition is already called for, although the last edition was only issued in September, 1899 We can commend particularly the original illustrations and the descriptive text of the pathologic conditions that show his familiarity with this

branch of the subject, and we can recommend the volume to those who need a work on these diseases

LARYNGEAL PHTHISIS By Richard Lake, F R C S, Surgeon, Laryngological, North London Hospital for Consumption, etc With Thirty six Illustrations Cloth Pp 94 Price $2 00 Philadelphia P Blakiston's Son & Co 1901

This attractive little book of ninety pages presents the author s personal observation of over three hundred cases of the disorder The bulk of the work is given up to a concise statement of symptoms, signs, pathology, prognosis and local treatment and a brief display of cases from the author's clinical records The thirty six cuts are excellent in drawing, but the coloring is somewhat exaggerated, a criticism, however, which is applicable to the vast majority of colored plates made to represent the mucous membrane, normal, and the seat of various degrees of inflammation The author has included an instructive tabulation of his 329 cases The book is an addition to the literature of the subject, because it is a result of personal experience and not a mere repetition of the work of others

INTERNATIONAL GLOBE AND GEOGRAPHICAL MANUAL The International Globe being printed back to back on one sheet Circular in Form, 28 inches in Diameter Price $2 00 International Globe Co, Continental National Bank Building, Chicago

This is a convenient form of condensed geography, the circular map with its attendant pamphlet furnishing a handy bird's eye view of the great natural and political divisions of our globe

Miscellany

Thrombosis of Iliac Vein —Dr William Osler exhibited at a recent clinic a case of thrombosis of the iliac vein following pneumonia, and the second case seen at the Johns Hopkins Hospital this year Pneumonia has the largest percentage of fibrin of any acute disease The fibrin can be seen between the rouleaux of red corpuscles and, postmortem, firm hard clots are found in the heart It is almost the only disease in which we can draw out firm clots from veins and sinuses In this case a cord could be felt extending from the middle of Poupart's ligament some eight inches toward the umbilicus There was no tenderness There is danger of detachment of the clot and sudden death Hence the limb should be kept absolutely at rest and should not be moved or handled much

Fads in Medicine —M R Brown, M D, in the *Chicago Sunday Tribune*, says "From the days of Hippocrates until the present time the mission of medicine has been to find out the truth as to physical well being and by applying it to benefit mankind It has studied with scientific interest or viewed with pity whatever "pathies" or fads have risen in its domain, flourished for a time, and then fallen into decay If by fads in medicine we are to understand (as the definition of the word implies) a trivial fancy adopted and pursued for a time with irrational zeal, or a matter, whether important or unimportant, imperfectly understood and taken up and urged with more zeal than sense, we will find less fads in medicine than in any of the other sciences In fact, medicine, as I understand it in its strict sense, is free from fads, but when confused with some of the irregularities bordering on or embraced in quackery, it must be admitted that it abounds in fads Experiments carried on with almost irrational zeal by some enthusiasts in medicine have not been done as a fancy but as a search after knowledge or as a means of benefitting mankind, and therefore can not rightly be considered fadism If a new principle is enunciated, a new remedy discovered, or a new method of treatment worked out, patients flock for a longer or shorter time to the physician concerned, and such a practice is often called a fad But the definition given does not apply As instances of real fads I would mention osteopathy and mental therapeutics, including in the latter term "Christian Science," faith healing, and Dowieism, mind cure, etc The former owes its recent origin to an obscure physician in western Missouri It had an earlier origin from Borelli, who flourished in Naples in the early part of the seventeenth century It is a mechanical theory of medicine, and like massage, of which it is an improved form, it has or may have a limited use To maintain it as an exclusive system is illogical, is a substitution of a part for the whole, and the present pursuit of it is clearly fadism Mental therapeutics, especially in its most fashionable form of "Christian Science," is only a revival, with Christian symbols, of the old pagan worship of the god Æsculapius in pre Homeric days The faith healers of that epoch, who were called Asclepiads and who were bitter opponents of Hippocratic or scientific medicine, repudiated drugs and healed, or claimed to heal, disease by sacrifices, prayer, and moral agencies This seems to be the most rampant "medical fad" of the day, but it will, like its ancient prototype, run its course and be forgotten, for if disease is mere imagination and medicine a delusion, then all experimental science in all the practical departments of life is equally so—a conclusion which common sense refuses to accept Medicine will endure and be a power for good so long as men have bodies to suffer or decay Like its mistress—truth—it is everlasting It is not omnisient nor infallible It is subject to the limitations of human nature Its field of work, the human body, is still mysterious and obscure and affected by all manner of influences from the vast world outside But medicine is honest and unselfish and pursues its steadfast course, confident that fads and systems will perish and that the truth will endure

Societies

COMING MEETINGS

American Medical Association, St Paul, Minn, June 4 7
American Laryngological Association, New Haven, Conn, May 27 29, 1901
American Pediatric Society Niagara Falls N Y, May 28, 1901
American Gynecological Association, Chicago, May 30 June 1
American Climatological Association, Niagara Falls, N Y, May 30, 1901
Association of Military Surgeons of the United States, St Paul May 30, 31, June 1, 1901
American Academy of Medicine, St Paul, Minn, June 1 3
National Con State Medical Examiners and Licensing Boards St Paul, Minn, June 3
Association of American Medical Colleges, St Paul, June 3
American Medical Editors' Association, St Paul, June 3
Minnesota State Medical Society, St Paul, June 3
Indian Territory Medical Association, Vinita, June 4 5
American Proctological Association, St Paul, Minn, June 4 5
American Dermatological Association, Chicago, June 4 6
Rhode Island Medical Society, Providence, June 6
South Dakota State Medical Society, Huron, June 10 11
International Association of Railway Surgeons, Milwaukee, June 10 12
Medical Society of Delaware, Lewes, June 11
Oregon State Medical Society, Portland, June 11 12
American Medico Psychological Association, Milwaukee, Wis, June 11 14
Maine Medical Association, Portland, June 12-14
Massachusetts Medical Society, Boston, June 12
Colorado State Medical Society, Denver, June 18
American Orthopedic Association, Niagara Falls, June 11 13
Medical Society of New Jersey, Allenhurst, June 25 27
Wisconsin State Medical Society, Waukesha, June 26

Lancaster City and County (Pa) Medical Society.—At the meeting of this Society, May 1, ten members were elected delegates to the AMERICAN MEDICAL ASSOCIATION

American Association of Life Insurance Examining Surgeons —The meeting of this Association will be held in the Masonic Hall, Lowry Arcade, St Paul, and not in the rooms of the Ramsey County Medical Society as announced in last week's issue

Association of Life Insurance Medical Directors —The annual meeting of this Association will be held in Hartford, Conn, May 28 and 29, under the presidency of Dr George R Shepherd, Medical Director of the Connecticut Mutual Life Insurance Company

Ohio Pediatric Society —The seventh annual meeting of this Society was held in Cincinnati, May 8, president, John M Dunham, Columbus, in the chair The following officers were elected Dr David S Hanson Cleveland, president, Drs Thomas V Fitzpatrick and John H McCassy, Dayton, vice

presidents and Dr J D Kafron Cincinnati secretary and treasurer

Southern California Medical Society—The twenty seventh semi annual meeting of this organization was held in San Diego May 1 and 2 The election of officers resulted as follows Dr Wesley W Beckett Los Angeles, president, Drs Fitch C I Mattison Pasadena and Dr Charlotte Baker, San Diego vice presidents and Dr Frank D Bullard, Los Angeles secretary and treasurer

Indiana State Medical Society—This Society held its fifty second annual meeting in South Bend May 15, 16 and 17, and elected Dr Alembert W Brayton, Indianapolis, president Dr J B Berteling South Bend vice president Dr Frederick C Heath Indianapolis secretary Dr William H Gilbert, Evansville assistant secretary and Dr Albert J Bulson, Jr Fort Wayne treasurer Evansville was selected for the next meeting

Association of Surgeons of the Southern Railway—This Association met at Mobile May 7 8 and 9 The election of officers resulted as follows Dr Thomas H Hancock, Atlanta Ga president Drs Elliott Goode Mobile Ala and Henry C Fairbrother East St Louis Ill vice presidents Dr Samuel Lile, Lynchburg Va secretary and treasurer and Dr W C Connally Dallas Ga censor The 1902 meeting will be held in Washington D C

Association of Military Surgeons of the United States—The Surgeon General of the Navy has designated Medical Director Delavan Bloodgood to represent the navy at the St Paul meeting of this Association Major John Van R Hoff and Captain Alfred I Bradley will represent the Army, and the governor of Minnesota has appointed Drs Reynaldo J Fitzgerald and Charles I Dutton Minneapolis, Dr William Jacoby Wells Dr William H Rowe St James, Dr Asa F Goodrich St Paul Dr Alvinza B Cole Fergus Falls and Dr John N Dorsey, Glencoe delegates from the state

Chicago Society of Internal Medicine—The annual banquet of this Society was held at the Auditorium, May 16, Dr William Osler, Baltimore being the guest of honor Dr John A Robison presided and "Medicine' was discussed in its various forms and phases as follow Dr Llewellys F Barker, "Foundation Stones of Medicine", Dr Walter S Christopher, 'Tendencies of Medicine', Dr John B Murphy, "Surgery of Medicine Dr Norval H Pierce, "Music in Medicine", Dr Frank Billings 'Chicago Medicine," and Dr William A Evans, Finalities of Medicine"

New Mexico Medical Society—The twentieth annual session of this Society was held in Alamogordo, May 8 to 10, Dr G C Bryan Alamogordo, presiding The following officers were elected Dr George W Harrison Albuquerque, president, Drs G C Bryan Alamogordo, B E Lane, Las Cruces, Charles M Whicher Carlsbad, vice presidents, Dr J Frank McConnell Las Cruces secretary, and Dr Walter G Hope, Albuquerque treasurer Delegates to the AMERICAN MEDICAL ASSOCIATION were also appointed The next session will be held in Albuquerque May 14, 1902

Mississippi State Medical Association—The thirty fourth annual meeting of this Association was held in Jackson May 9, 10 and 11 The following officers were elected Dr James M Buchanan, Meridian, president, Drs Charles D Mitchell, Pontotoc, and Anthony Miller Panther Burn, vice presidents, Dr Clifford H Trotter, Winona, secretary, Dr Benjamin L Culley, Jackson assistant secretary, Dr David S Humphreys, Greenwood corresponding secretary, and Dr John F Hunter, Jackson treasurer Delegates to the AMERICAN MEDICAL ASSOCIATION were also elected

American Medical Temperance Association—This association will hold its tenth annual meeting in the Ryan Hotel, St Paul, June 5 The program will include the president's address and the following papers

Dr N S Davis Chicago Shall We Continue Striving to Improve the Environment of the Poor and Render Sterile by Mutilation and Electrocution the Degenerates to Prevent their Propagation of their Kind or Shall We More Directly Prevent their Poverty and Degeneracy by Removing the Chief Causes? Dr H A Didama Syracuse N Y The Decline of Alcoholic Medication Abroad Dr W S Hall Chicago Alcohol as a Stimulant and its Fallacies Dr John Madden Milwaukee Wis The Recrudescence of Alcohol Dr E Stuver Fort Collins Colo Alcohol in High Latitudes Dr T D Crothers Hartford Conn Text Book Teachings of Alcohol in Common Schools Dr Ivan D Mishoff Milwaukee Wis Why Men Use Alcohol and Dr Dudley H Reynolds Louisville Ky The Danger of Cigarettes to the Young

Michigan State Medical Society—The thirty sixth annual meeting, at Battle Creek was presided over by Dr Philo D Patterson, Charlotte The session opened May 15 and continued for two days Among the matters of importance brought up was the report of the Committee on legislation which, through its secretary, Dr Emil Amberg, Detroit presented the following proposed changes in the state medical laws 1 That all graduates from medical schools shall come before the board for examination 2 That only graduates of reputable medical colleges be admitted to practice, reputable medical colleges being those whose course of study is not less than four years in length and is approved by the board 3 That before entering a medical school a candidate must be a graduate of a high school with certain requirements or else submit to an examination in the presence of some member of the board 4 That the equipment and number of laboratories in medical schools shall be specified in their announcements and inspected by the board 5 That licenses can be revoked by the board for fraud in connection with the registration and for immoral conduct of practitioners

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THE AMERICAN SURGICAL ASSOCIATION

Meeting held in Baltimore, May 7, 8 and 9, 1901

The President, Dr Roswell Park, of Buffalo, in the chair

MAY 7—MORNING SESSION

Some Phases of the Cancer Question

The President read his Annual Address, entitled as above, and stated that pathologists who study the condition purely from the dead house point of view, have confronted some of the greatest problems which it has to offer, but have also missed some of its most important aspects The parasites of cancer, be their nature what it may, are in all probability polymorphic in extreme degree and masquerade under many forms, changing with their different stages of reproduction There is no other disease which is characterized by metastasis in which the pathologists decline to see evidence of parasitism Every metastasis of cancer has the form and significance of an inoculation experiment only performed under the most favorable, because natural, conditions The primary question after all, is the general one of parasitism, but it has not yet been reduced to a question of just what parasite In the author's opinion it may and probably will be found that cancer is not a question of any single organism, and possibly not even of a single class The latest work of Roger Williams was then quoted at some length and reference was made to Demarquay, who collected 134 cases of cancer of the penis, whereas in only one instance was the wife affected with uterine cancer Numerous cases are now on record of cancer along the track of the trocar used in tapping for ascites due to cancerous disease, and surgeons now generally admit this traumatic dissemination of the disease by inoculation of wounds during operations From studies already made in the New York State Laboratory it seems to be clear that death in cases of cancer comes about, as in so many other diseases, by a sort of terminal infection, which is a conspicuous feature of the disease and has not hitherto attracted sufficient attention The exact nature of these terminal changes has not yet been made out beyond what is implied in the term "Hematogenous" The predictions of the Italians have failed in many respects, and it is by no means so easy to successfully inoculate animals with the yeast as has been generally supposed By comparing tumors removed by operation with those removed postmortem, it becomes evident that the organisms either increased rapidly during the period just before death, or that they proliferate in the tissue immediately after death In practically all scrapings from cancer could be seen either small hyaline refractive forms which in suspension possess a characteristic oscillating motion, or larger forms with projecting pseudopodia, or sacular forms containing very refractive spherical bodies

The work of Dr Gaylord in association with the author was then dwelt upon at considerable length A full report was promised in a short time of the results of inoculating seventy two animals with the technique employed That cancer begins as a purely local infection has been verified by the recent experiments made by the author in the laboratory at Buffalo, and also that it kills by becoming generalized, which is equally true to tuberculosis The author concluded his paper by stating, "I want to make it as evident as possible that carcinoma is an epithelial infection"

Mammary Cancer

DR W S HALSTED, of Baltimore, made a few remarks on a "Brief Consideration of the Cases of Cancer of the Breast," treated at the Johns Hopkins Hospital since 1889 He re

ported having operated on 320 cases of carcinoma of the breast and 450 cases of the breast tumor, as well as three cases of primary sarcoma of the breast He referred to the difficulty of compiling statistics and demonstrated the method of grouping the cases at the Johns Hopkins in order to arrive at the approximate results His experience is that the percentage of recurrences is very variable, and he reported that out of 129 cases operated upon, 51 had been cured

Treatment of Inoperable Sarcoma

DR W B COLEY, of New York, read a paper entitled "Late Results of the Treatment of Inoperable Sarcoma with the Mixed Toxins of Erysipelas and Bacillus Prodigiosus, with a Report of Cases" The writer stated that the object of the paper was to determine, if possible, whether the action of the toxins upon sarcoma is to be regarded as of temporary or permanent value, in other words, whether or not it is entitled to be called curative Fifteen cases have passed the three year limit, and two of them are now well at the end of three and three fourths, and four and one fourth years respectively Thus far no permanent successes have been obtained in melanotic growths nor in lymphosarcomas of the neck The writer still believes that the action of the toxins upon malignant tumors can be explained only upon the theory that such tumors are the result of some infectious micro organism, and this view is strongly supported by the recently expressed opinion of Czerny

Mental Influence on Malignant Disease

DR JOSEPH D BRYANT, of New York, read a paper entitled "The Influence of Mental Depression on the Development of Malignant Diseases," in which he dwelt at length on the history of cancer as affected by mental depression Paré in 1510 was the first man to refer to mental perturbation, anger and the like, as making a cancer "more fierce and raging," while the same authority under the head of treatment, insists that the patient must eschew fasting, watching, sorrows, cares and mourning Sir Astley Cooper was of the same opinion, while Velpeau thought otherwise Grant and Napoleon have been referred to as examples of cancer following reverses, and Paget and Virchow gave a qualified allegiance to the passive side of the question The foundations of the different phases of the contention rest on the beliefs, 1, that cancer may result from the direct influence of mental depression, 2, that cancer may arise indirectly from mental depression because of the defective nutrition attendant upon it, and 3, that mental depression exercises in no respect influences that admit of sufficient proof to warrant serious discussion The author referred to the infrequency of cancer in insane patients, and stated that females suffered twice as often as males Statistics were given from a number of institutions which showed that the death-rate in the female was nearly double that of the male, although there were more male melancholics, but melancholia in the male does not seem to exercise any distinctive effect on the death rate Neither is melancholia in the male more often associated with cancer than with other forms of malignant growths

AFTERNOON SESSION

DR J COLLINS WARREN of Boston in discussing the foregoing papers stated that there were several different ways of approaching the question as exemplified by different writers, and referred to the geographical, statistical, histological, experimental, and blastomycetic The experimental was divided into chronic irritation and inoculation, and reference was made to the fact that two papers had appeared during the year in favor of the protozoan theory of the disease Lack produced peritoneal cancer in a rabbit by scraping the ovaries, which observation, so far as known, has not been confirmed by any other observer

Clinical Value of Blood Examinations in Appendicitis

DR J C DA COSTA discussed this subject under the heading of, 1, methods and technique, 2, classification, 3, the anemia of appendicitis The details under each one of these headings was discussed at great length and a large number of blood counts were given, both actual and comparative

Blood Examination in Relation to Surgical Diagnosis

DRS J B BLAKE, J C HUBBARD and R C CABOT read a paper on this subject, and divided the subject into, 1 the leucocyte count in fracture, 2, postoperative leucocytosis, 3, ether leucocytosis, 4, the effect of fear on the leucocytes, 5, regeneration of the blood after the operations on malignant tumors, and 6, blood examinations in relation to intestinal perforation in typhoid fever

Effect of Ether on the Blood

DRS J CHALMERS DA COSTA and J L KALTEYER of Philadelphia read a paper entitled "The Effect on the Blood of Ether as an Anesthetic" The authors concluded that the hemoglobin is absolutely reduced after the administration of ether, this reduction being manifest in the individual corpuscular hemoglobin value The increased hemolysis which occurs in Nature's effort to rapidly replace the destroyed corpuscles and the regenerated cells are imperfectly supplied with hemoglobin The author urges that, whenever possible, one or two blood examinations should be made before ether is administered, and these examinations should be made before preparatory treatment has been instituted If less than 50 per cent of hemoglobin is present an anesthetic is dangerous and should only be given in a surgical emergency which threatens life In malignant disease a percentage of under 50 per cent contraindicates operation Mikulicz says no general anesthetic should be given under any circumstances if the hemoglobin is under 30, but the author believes that 40 per cent is probably the lowest justifiable limit If operation must be performed when the hemoglobin is under 40 per cent a local anesthetic should be given It is true cases with under 40 per cent of hemoglobin are occasionally etherized successfully—for instance, one case was recalled with only 24 per cent—but such instances are rare, are not sufficiently numerous to set aside the rule, and are only justified by the imperative necessities of a vital emergency Whenever the percentage of hemoglobin is low the administration of the anesthetic should be entrusted only to an experienced man, as little ether as possible should be given, the surgeon should operate quickly and proper measures should be adopted to bring about reaction promptly and to remove the ether from the lungs and blood as quickly as possible

Examination of the Blood in Surgery

DR JOHN B DEAVER, of Philadelphia, read a paper entitled "Examination of the Blood in Relation to Surgery of Scientific Value, but too often of no Practical Value and may Misguide the Surgeon" The subject of appendicitis was discussed in detail and the value of the microscope in bedside diagnosis was referred to, but the author felt that too much importance should not be attached to this as compared with the weight given to other signs of the disease, some of the latter possessing, in his opinion, greater merit as aids to the surgeon

DR B FARQUHAR CURTIS, of New York, in his discussion on the foregoing papers, remarked the frequency of leucocytosis following ether anesthesia, and stated that it occurred quite as often after intraspinal anesthesia He did not believe that leucocytosis should be considered as demonstrating the existence of infection, but rather that it should be looked upon as a fixed factor following anesthesia, illustrating this point by reference to a case While he considered this point of great value he felt that the temperature and pulse record were equally so

SECOND DAY—AFTERNOON SESSION

Pancreatitis with Special Reference to Chronic Pancreatitis

MR A W MAYO ROBSON, of Leeds, Eng, read a paper entitled as above The author commented on the fact that he thought it strange it had not until recently dawned on the minds of clinical observers that whatever obstructs the common bile duct at its lower end must also of necessity lead to an obstruction in the pancreatic duct When the common bile duct is obstructed the objective sign of jaundice at once demonstrates the fact, but hitherto no pathognomonic sign has been discovered which will show conclusively that the pancreatic ducts are occluded unless it be the extreme loss of weight When it is borne in mind that the pancreatic duct opens along with the common bile duct into the second part of the duodenum it is not a matter for surprise that pancreatitis should be met with The essential and immediate

cause of the various forms of pancreatitis is bacterial infection, which has been positively proved both clinically in the human subject and experimentally in the lower animals The association of gall stone with chronic pancreatitis was absolutely forced on his mind by the frequency with which he found inflammatory enlargement of the head of the pancreas when operating for gall stones in the common duct Taking up the subject of fat necrosis it was stated that this condition was commonly found in association with pancreatitis, and the relationship between the two conditions has given rise to much speculation

Surgical Treatment of Chronic Ulcer of the Stomach

Mr. A W Mayo Robson, of Leeds Eng, read this paper, and stated that the treatment of these cases is at first essentially medical He compared the treatment of ulcer of the stomach with that of ulcer of the leg and particularly referred to the tendency to relapse Twenty three affections were referred to as complications of the condition which were looked upon as serious menaces to the treatment of the ulcer He believe that about 25 per cent of cases of gastric ulcer treated medically died while only about 16 per cent treated surgically died, according to statistics a year ago, but at the present time, while the percentage death rate in cases treated medically remains about the same, it has been reduced to 5 per cent under surgical treatment A number of operations were mentioned, from which one could take his choice, and great stress was laid upon the importance of the proper preparation of the patient before operation The number of operations performed by the author, divided up according to the number performed of each kind, were given and the method he employs in stomach and other operations involving the making of an anastomotic opening between the hollow viscera The author demonstrated the method which consisted practically of the employment of a method of suturing over a decalcified bone bobbin

Dr William J Mayo of Rochester, Minn, said that excision or other form of surgical treatment is indicated in a few cases presenting special features, but the common situation of the ulceration its varying extent and the reasonable possibility that more than one ulcer exists makes gastroenterostomy the practical operation in the majority of cases Not infrequently the site of the ulcer can not be discovered, rendering gastroenterostomy the operation of necessity

The symptoms of ulcer of the stomach depend somewhat upon the situation of the disease Ulcer is most common near the pylorus, a position which may introduce certain mechanical features, and it is in the relief of these secondary phenomena that this operation achieves its triumphs Gastroenterostomy relieves the hyperacidity and allows prompt emptying of the ingesta, preventing irritation and aiding nutrition

The ulcerated stomach is often contracted, and among the earlier writers it was supposed to be always small, this is but part of the truth In acute ulcer it is small, and if the ulcerative process is not in the vicinity of the outlet it will probably remain small On the contrary, it is during the healing process that many ulcers in the pyloric region become most troublesome Ulcers in this situation are often extensive, and in chronic cases perhaps but party cicatrized Enough distortion or narrowing of the pyloric outlet takes place to materially obstruct the opening The unhealed portion of the ulcer keeps up irregular symptoms of its presence in addition to the dilatation In such cases symptoms of open ulcer alternate with periods of health and later signs of ulcer in a stomach, more or less dilated, supervene The majority of cases when once cicatrized remained healed, but a minority occasionally lapse into open ulcer The capacity of the stomach affected by ulcer is not greatly changed in the majority of cases, but if so it has a surgical significance This gives us a good working basis for comparison 1, ulcers in the pyloric region with a normal or enlarged stomach, and 2, ulcers in a contracted stomach

Dr W G Macdonald, of Albany, N Y reported two cases of posterior gastroenterostomy for the relief of chronic ulcer of the stomach One case which existed for eight years, did very well for ten months, when distinct symptoms presented themselves of a well developed tumor in the region of the pylorus, the patient dying shortly afterwards of carcinoma of the stomach The second case was very similar, except that the improvement following the operation lasted for a somewhat longer time

Dr William L Rodman, of Philadelphia, called attention to the fact that malignant degeneration frequently takes place on the site of an old benign ulcer, and also that the great majority of gastric ulcers are situated posteriorly and not anteriorly In his opinion adhesions play a very important part in these conditions but he felt that, if the ulcer is anterior and free from adhesion the operation should be done, while if it is posterior, it is out of the question

(To be continued)

MEDICAL SOCIETY OF THE STATE OF CALIFORNIA

Thirty first Annual Meeting held in Sacramento, April, 1901

Dr Thomas Ross Sacramento, the president, presiding

Bubonic Plague at the Close of the Nineteenth Century

Dr David Powell, Marysville, in his paper went exhaustively into the history of the disease, calling attention to the fact that for the first time in its history it had reached the Western Hemisphere He referred to the 32 fatal cases which had been reported in San Francisco in the last year, confined, with two exceptions, to the Chinese population and lamented the frustration of repressive measures caused by the unwarranted opposition from the newspapers and business interests of the city He reviewed the work of the Federal Commission recently appointed to investigate this matter and their report showing 6 of the 13 cases examined by them to have been plague The disease has been confined almost exclusively to the Chinese, and an examination of the mortuary records of the latter for the last four years shows that there has been no time during that period when it has increased to such an extent as, in itself, to cause alarm The recent liberal appropriation for sanitary improvement, which is now being expended under the supervision of the municipal, state and federal health authorities in San Francisco indicate that California has at last learned, and will profit by the lessons of past epidemics However, the danger of fresh invasions which threaten this country, from both the Atlantic and Pacific because of more direct and intimate communication with oriental countries should not be forgotten Let those on whom the responsibility rests be sure that nothing short of the vigilant exercise of the most modern sanitary precautions, and the vigorous quarantine and prophylactic measures, can prevent the insidious encroachment of this relentless enemy upon American soil

Pathology and Bacteriology of Plague

Dr W H Kellogg, city bacteriologist of San Francisco, read this paper He described the general characters of the bacillus, regarding morphology, staining properties, culture media, appearance of colonies, etc While it was until recently supposed that the plague bacillus was a very delicate organism and easily killed by the ordinary vicissitudes of extracorporeal existence, he referred to recent experiments by Rosenau and others that seem to oppose this conclusion, and he thinks they can in no sense be considered tender organisms, as was at first supposed He referred to the pathologic conditions found following animal experiments, and the greater susceptibility of certain animals over others Either of the three forms of the disease may be produced in animals by varying the method of inoculation If the culture is painted on the nose, with a camel's hair brush, the pneumonic form of plague is produced If the culture is rubbed into a slight abrasion of the skin of the leg, the bubonic form is the result, and if injected subcutaneously, the septicemic form ensues The latter was the method he used in routine diagnostic work and he described lesions in experimental plague from the autopsy records of the animals used in establishing the diagnosis of some of the San Francisco cases Prominent among the lesions present were coagulation necrosis at the point of inoculation, sub

cutaneous edema at different parts of the body, enlargement of lymphatic glands with hemorrhages into the gland substance, injection of superficial veins and also mesenteric vessels turbid fluid in peritoneal pericardial and pleural cavities heart muscle hyperemic, and cavities filled with dark blood, spleen uniformly enlarged, mottled in appearance, and filled with small nodules containing pure culture of the bacillus The author thinks that the bacillus above described, is the cause of plague is a fact as well established as that the earth is round although there are people who dispute the latter fact, and probably these same ones, or others of equal mental caliber still dispute that cases of plague have been found in California

Extra Uterine Pregnancy

DR FRANK L ADAMS, Oakland, reported four cases of extra uterine pregnancy treated by the vaginal route He called attention to the fact that this condition is not so rare as was formerly held Formad reported 35 cases, or 1 per cent, found in making 3500 general autopsies He stated that the best writers now maintain that nearly every instance of pelvic hematocele is the result of ectopic pregnancy He mentioned the different theories presented as to the probable cause of this condition, and called attention to the fact that early rupture was the rule The symptomatology was referred to in detail He thinks that abdominal section was the best method of treatment in the great majority of cases, especially when internal hemorrhage was suspected When, however, there was a well defined and movable mass felt through the vaginal vault, vaginal section and drainage were clearly indicated In properly selected cases the vaginal method was better, safer, and more rapid than the abdominal one This was especially true when an adherent sac, accompanied with suppuration and an active peritonitis had to be dealt with By this method the tubes and ovaries were preserved, the abdominal cavity not opened and intestinal adhesions avoided The shock was much less marked as the anesthesia was much shorter, and the handling of the bowels avoided The rest of his paper consisted of the clinical report of the four cases which he had operated on per vaginam

Surgery of the Lungs

DR WILLIAM LEMOYNE WILLS, Los Angeles, in a paper, called attention to the fact that the peculiar climatic conditions of California and the great influx to this state of those suffering from pulmonary tuberculosis in its different stages, made the subject one of peculiar interest He drew a detailed picture of the history of lung surgery from the time when Hippocrates wrote about pneumonic abscesses and their cure to the present He believes that very many are allowed to go from bad to worse and perish from tubercular disease because of the inability of the physician to recognize the necessity for, or the hesitation to insist on, an operation, which would at least ameliorate, if not permanently cure, the condition After referring to the dangers in these operations, as shock, hemorrhage, pneumothorax, and sepsis, he called attention to the four plans to be considered in the surgical treatment of pulmonary tuberculosis These are 1 Aspiration of cavities and the introduction into them of drugs 2 Incision and drainage of cavities known as pneumonotomy 3 Pneumonectomy, or excision of the tubercular area 4 Obliteration of the cavity by collapse of lung

Aspiration has proved an unqualified failure After pointing out the indications for pneumonotomy and pneumonectomy, he stated that the object of his paper was to urge all physicians to use every endeavor to look at this subject from a surgical standpoint, and whenever justifiable to advise operative treatment, thus doing much to relieve the suffering of the last days of, if not permanently cure, the largest class of patients sent to our coast

Renal and Ureteral Surgery

DR J HENRY BARBAT, San Francisco, presented a paper on "The Present Status of Renal and Ureteral Surgery" He called attention to the great progress in the past ten or fifteen years in the diagnosis and surgical technique of renal and ureteral affections, and particularly the means we possess in the x ray for determining the presence and location of calculi He referred in detail to ureteral anastomosis, and the large amount of experimental work which had been done by Gaspare, D Urso, Achille de Fabri, and himself He believes that these operations would find their place in the surgery of the future, and, as the technique improves, the danger of such formidable operations will grow less, and we will be able to save lives which are now lost on account of our timidity

Subarachnoid Injections of Cocain

DR A W MORTON, San Francisco, presented a paper entitled "The Subarachnoid Injection of Cocain for Operations on all Parts of the Body" He reviewed the dangers and disadvantages of general anesthesia in comparison with this newer method, and called particular attention to the necessity of careful preparation of the cocain solution and technic of injection He reported 253 cases from his own practice, several of which were operations on the upper extremities, and one a case of trephining of the skull

Carcinoma of Bile Duct

DR J EMMET RIXFORD, San Francisco, presented a paper on "Carcinoma of the Lower End of the Common Bile Duct Successfully Removed, Reimplantation of the Duct into the Duodenum, Recurrence after one Year" The patient was a woman, 33 years of age who, without pain or other warning, became suddenly jaundiced in June, 1899 The writer did not see her until October 18 of that year, when he found her greatly emaciated, intensely icteric and excessively weak The gall bladder was distended, reached below the umbilicus, and was moderately tender He operated on October 22, punctured the gall bladder, removing eight ounces of thick, green bile No stone was found A hard mass was felt beneath the duodenum in the region of the papilla The mass being movable, the omentum was opened between ligatures and the pancreas exposed The pancreas being in intimate connection with the duodenum the mass was reached by going through the duodenum instead of around it This was done by making a longitudinal incision 1½ inches long The duodenum was empty at this point and an incision was then made in the opposite wall over the nodule, through which a transparent mass of tissue was removed This relieved the obstruction, and the field of operation was immediately filled with bile, which could only with difficulty be wiped away fast enough The patient being exceedingly weak, further dissection was postponed until the nature of the tumor could be determined The incision into the duodenum was closed, and the gall bladder sutured to the peritoneum in the upper angle of the incision a drainage tube being inserted into the gall bladder The course of convalescence was uneventful The tumor being reported as adenocarcinoma, and it being certain that the section made at the operation was not sufficiently extensive to insure against recurrence, and the tumor being very small, a radical operation was attempted thirty days later The tumor, with adjacent portions of the duodenum, was excised with curved scissors Careful palpation over the adjacent region discovered two retroperitoneal lymph nodes, which were isolated and removed The choledochus, one and a half inches of which had been excised with the tumor, was implanted in the upper angle of the duodenal incision The gall bladder was freed from its adhesions to the skin and closed The opening was partially closed and a Mikulicz drain inserted to the region of the duodenal suture The secretion from the wound had ceased entirely about the eighth day, the wound was entirely healed on the twenty third day, and the patient felt strong and left the hospital She remained perfectly well for eight months, at this time examination showed that recurrence had taken place, and as she suffered from attacks of indigestion and intense jaundice, it was proposed to give what relief was possible by making an anastomosis between the gall bladder and the small intestine The old scar was cut away, but the whole region was so filled with tumor masses that the operation was performed with the greatest difficulty Convalescence from this operation was uninterrupted, and the patient left the hospital in good spirits and comfortable, in twenty two days, and for some time rapidly gained in strength, but gradually got

weaker and anemic She died about four months after the last operation

Rheumatism in Children

DR WM LITCH CHENEY San Francisco presented a paper on the Manifestations of Rheumatism in Children and based it on 1422 cases observed in the childrens clinic at Cooper Medical College during seven years The paper detailed clinical reports and the different manifestations dealt with, as follows 1 Manifestations in joints 2 Manifestations in heart 3 Chorea 4 Purpura rheumatica 5 Subcutaneous nodules 6 Tonsillitis Under the chronic manifestations he referred to the close relationship according to some authors between rheumatism and chorea but according to his own observations the place of chorea among the rheumatic manifestations is rather a doubtful one unless we assume, as some authors do that chorea is in itself a rheumatic manifestation no matter whether others occur or not He reported two cases of purpura rheumatica in which the connection between the purpura and other undoubted rheumatic manifestations was so close as to justify the diagnosis of rheumatic purpura Regarding the question of a tonsillitis being a manifestation his experience leads him to believe that the coincidence is too frequent to give tonsillitis a place in the rheumatic series

Officers

The officers elected for the ensuing year are Dr W J G Dawson, St Helena president Dr J B Carpenter, San Francisco first vice president Dr Frank J Adams Oakland second vice president Dr George H Evans San Francisco secretary Dr Elmer E Kelly San Francisco treasurer The society selected San Francisco as the next place of meeting

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IOWA STATE MEDICAL ASSOCIATION

The semicentennial meeting was held at Davenport May 15 16 and 17 1901 under the presidency of Dr Robert J Conniff Sioux City

The sessions were well attended the papers were short practical and instructive and the discussions spirited

President s Address

In his address the president gave a retrospective view of the advances that have been made in medicine and surgery in the last few years Among other things, he urged the establishment of a state sanatorium for the treatment of the indigent consumptive poor, and suggested that action be taken to influence the State Legislature to appropriate sufficient money for the construction and maintenance of said sanatorium He also recommended the enactment of a law to regulate marriage among the defective classes

Organization

DR IRA K GARDNER Chairman of the Committee on Constitution and By Laws, read the report of the Committee, and asked that action on it be deferred until the next annual meeting, for the reason that at the St. Paul meeting of the AMERICAN MEDICAL ASSOCIATION a report is to be made looking toward the reorganization of that Association, and in case that report was adopted, such changes would have to be made in the Constitution and By Laws of the Iowa State Medical Society as would make them conform with those of the AMERICAN MEDICAL ASSOCIATION He outlined the salient features of the report of the Committee on Reorganization of the AMERICAN MEDICAL ASSOCIATION, and urged the Iowa delegates to go to St Paul and do everything in their power towards its adoption The suggestions were adopted

Puerperal Infection

DR ROYAL L CLEAVES, Cherokee, in a paper on 'Puerperal Infection,' discussed the varieties and causes He narrated the report of a case of pyemia and septicemia, and then gave his conclusions drawn from a long experience and made a plea for asepsis in the lying in room

DR. GILBERT G COTTAN Rock Rapids discussed puerperal infection from a surgical standpoint He detailed a series of cases illustrating the various forms of puerperal sepsis with deductions as to sources and prevention of infection The futility of temporizing measures was dwelt upon, and the manifest advantages of radical treatment at the onset of symptoms pointed out

Mammary and Uterine Cancer

DR DAVID C BROCKMAN Ottumwa spoke on the early diagnosis of mammary and uterine cancer Statistics show that three fourths of all cases of cancer begin in the uterus or breast Primarily they are local and curable if operated upon early The diagnosis is not always feasible, if it were many patients might be saved who now die The cardinal symptoms were pointed out Doubtful cases should be considered malignant until they are proved to be benign He urged the importance of examining thoroughly a specimen of the growth The symptoms of uterine cancer either of the cervix or body, were defined

DR CHARLES J RUTH Keokuk in a paper on the treatment of uterine and mammary cancer stated that the growth is primarily local There is a tendency to speedy death from exhaustion Recurrence of the disease is certain if a portion of it be left Metastasis takes place through the lymph channels and not by the fascia Serum therapy and other medication are unpromising Surgical treatment, while uncertain gives the only hope in such cases It was exceedingly difficult if not impossible to tell where normal tissue begins and where carcinoma ends He referred to drainage dressings and hysterectomy when and when not indicated He also discussed the vaginal and suprapubic routes Sloughing is a contraindication against hysterectomy

Ovarian Cysts and Malignant Sequelae

DR HENRY A LEHSICH Burlington, referred to the best available means of differentiating benign from malignant ovarian growths in the early stages Do apparently benign ovarian cysts contain foci of malignancy? He reported two cases in support of this view

Ovarian Tumor

DR WILLIAM J ALLEN Davenport reported a case of ovarian tumor in a child The tumor was first noticed when the child was 12 years and 6 months old The growth appeared at that time to be the size of a cocoanut Operation was done ten months later a simple unadherent cyst of the right ovary being removed which weighed about 12 pounds Rapid and complete recovery followed

Kidney Stone

DR DONALD MACRAE JR, Council Bluffs gave a brief resume of the work done in cases of kidney stone, the diagnosis and treatment He alluded to the importance of the X ray as a positive means of diagnosis, and showed numerous skiagraphs He emphasized the importance of thoroughly clearing the ureter

Duodenal Ulcer

DR DAVID S FAIRCHILD, Clinton considered ulcer of the duodenum from a surgical standpoint. Conditions were compared with those of ulcer of the stomach The importance of making a diagnosis before perforation was dwelt upon, as well as the difficulty attending diagnosis He discussed the methods which may be employed before and after perforation reported a case, and briefly reviewed other cases

Surgery of the Gall Bladder

DR ARTHUR L WRIGHT, Carroll, gave a brief history of the surgery of the gall bladder He pointed out the indications demanding such surgery and the methods used in determining such indications He dwelt on the most suitable time for the performance of such operation Should it always be done whenever gall bladder pathology exists? He considered the technique of the operation as well as the immediate and remote results

Election of Officers

The following officers were elected for the ensuing year Dr James R Guthrie, Dubuque, president, Drs Samuel Bailey, Mount Ayr, and John H Kulp, Davenport, vice presidents Dr Vernon L Trevnor, Council Bluffs secretary, Dr George

L Skinner, Cedar Rapids, treasurer Des Moines was selected as the place for the next annual meeting

NEW YORK ACADEMY OF MEDICINE

Meeting held May 2

Robert F Weir, M D, President

Clinical Aspect of Acute Intestinal Obstruction

DR HOWARD LILIENTHAL opened the discussion on this topic He said that the chief causes contributing to the mortality of this affection are shock sepsis and the embarrassment of the functions of the heart and lungs resulting from the abdominal distention Constricting neoplasms are common in elderly persons The discharge of foul gas is of far greater importance as an indication of the relief of the obstruction than the mere passage of feces Ischuria and great dryness of the mouth are of diagnostic value A number of successful cases have been reported in which a good result followed the administration of large doses of atropin—5 milligrams—but the mouth, already dry, is thereby rendered very much more uncomfortable, and these large doses are apt to cause a variety of delirium which closely simulates that dependent on sepsis This medical treatment may possibly be a justifiable temporary measure in cases of chronic ileus with acute exacerbation The speaker said that since 1893 he had performed 34 operations for acute ileus, with 41 per cent of recoveries It has been his practice for the past three years, in cases in which there was great distention of the bowel, to make a sufficient number of small incisions opposite the mesentery to relieve this distention While this procedure has been unfavorably criticised by some of the surgeons in New York City, he has seen nothing but good from it

DR B FARQUHAR CURTIS said that the only new diagnostic sign of importance is leucocytosis as an indication of peritonitis In cases of acute intestinal obstruction in elderly persons his first thought is of malignant disease Digital exploration of the rectum is an important aid to diagnosis in these cases As long ago as 1888 he pointed out, in a statistical study, that three fourths of the cases could be relieved by making an artificial anus, that one half recover and that fully one third of these are entirely cured of the intestinal obstruction The operation could be done quickly and without a general anesthetic if need be, hence it could be looked upon in appropriate cases as a life saving measure

DR C L GIBSON exhibited a table of statistics collected from 187 cases of acute intussusception, and pointed out the very rapid and significant increase in mortality in the first few days, as well as the increasing percentage of irreducible cases found during this period The establishment of an artificial anus certainly will often save life for the time, but it also makes it probable that grave conditions of the bowel demanding operative intervention will be overlooked or improperly treated

DR MORRIS MANGES said that the duty of the medical man is to make the diagnosis and then promptly call in a surgeon The important points to consider are the presence of shock and of more or less pain and vomiting A digital examination of the rectum will afford more valuable information in these cases than will the most careful abdominal palpation, even under a general anesthetic

DR HENRY KOPLIK said that acute intussusception sometimes comes on in an insidious fashion in children, thus increasing the difficulties of diagnosis He believes it to be most important to make the physical examination in children under a general anesthetic Often there is very little prostration in children at the beginning, and even vomiting and bloody stools may be intermittent

PHILADELPHIA COUNTY MEDICAL SOCIETY

Meeting held April 24

Dr George Erety Shoemaker in the chair

Antitoxin in Diphtheria

DR J D STEELE read a paper entitled the "Present Aspect of the Antitoxin Treatment of Diphtheria" He detailed the statistics regarding the beneficial results obtained in the treatment, which showed that in a series of 200,000 cases of diphtheria there was a mortality of 18 per cent In another series of 24,000 cases which had been reported the mortality was 16 per cent In the latter, when the antitoxin treatment had been employed on the first day the mortality was 3 per cent., while after the first day it was 34 per cent According to the report of the American Pediatric Society in a series of over 5000 cases reported in private practice the mortality was about 5 per cent Baginsky, in a series of cases first day reported a mortality of from 1 7 to 2 7 per cent, and when used on the second day the mortality was from 2 to 14 per cent The statistics of all the cases so far reported show that the mortality of diphtheria by this plan of treatment is 10 per cent In hospitals the mortality is 19 per cent The greater mortality in hospital cases is due to the fact that they are usually overcome by the disease before treatment is instituted In a series of 15,000 laryngeal cases the mortality is about 16 per cent, while in pre antitoxin days it was 70 per cent Formerly the death rate in these laryngeal cases was 70 per cent, while since the introduction of the antitoxin treatment, the number of recoveries is 70 per cent, thus reversing the death rate As to the influence exerted on the heart and kidneys by antitoxin, all results go to show that it has no deleterious action As a local remedy in the treatment of this condition he has obtained good results from the use of nitrate of silver (60 grains to the ounce), first recommended by Hand Applications should be made once daily for three successive days

Diphtheria

DR FREDERICK A PACKARD read a paper on this subject He said that in some instances the bacilli of diphtheria do not appear to be virulent simply because they have become attenuated It is his personal feeling that these latter cases, from a hygienic point of view, are of even greater importance than frank cases of the disease Symptoms of diphtheria depend on the local action of the micro organisms of diphtheria, and though bacilli have been found in the internal organs they probably have little to do with the general manifestations of the diseases Diphtheria is not a local disease, in the strict sense of the term, since its process may extend upward into the nares, or conjunctiva, and may involve the mucous surfaces elsewhere, or abrasions on the skin Absence of the false membrane is no guide to the absence of diphtheria bacilli In streptococcic infection there may be more pain and local manifestations The cases of diphtheria with a high frank temperature are more liable to recover than those with a lower temperature The danger of cardiac involvement in this disease is great even from the very first day Local palsies are more frequent than in any other disease

Prophylaxis of Diphtheria

DR J P CROZER GRIFFITH read a paper on the prophylaxis He believes the only way to eradicate the disease is by thorough disinfection Children who have recovered should be kept under close surveillance for a period of 10 to 14 days As a prophylactic measure the nurse should wear a skull cap of some kind and should disinfect the face and hands thoroughly when ever she comes in contact with the patient The mouth, too should be repeatedly rinsed out The physician should envelop himself with a rubber garment on entering the room, and after leaving should thoroughly disinfect himself All upholstered furniture in the room, all lace curtains and carpets should be removed, and after recovery of the patient the walls and ceiling should be painted, and the bedding thoroughly steamed Spraying the nose frequently frightens the child, and the nares should be irrigated by means of a syringe Peroxid of hydrogen is frequently too highly acid, and should be neutralized with lime water Ordinarily peroxid should be diluted with water 1 to 4 Bichlorid of mercury, 1 to 5000, seems of benefit For the pharynx peroxid of hydrogen in full strength may be used Locally, Löffler's solution is of advantage As to inhalations, it is foolish to try to keep the atmosphere in a room moist by evaporating in the open a small pan of water If any beneficial effects are to be obtained the bed must be enveloped in a sheet and the steam conducted upward

Bacteria of Diphtheria

DR A C ABBOTT spoke on the bacteria found in diphtheria, saying that in typical cases there should be no hesitancy in stating that there is a specific micro organism present, yet there are some cases in which the clinical symptoms do not designate that such is the case In diphtheria one should not be surprised to find the disease vary in type The differences in clinical manifestations are not due to the bacteria, but to the soil on which they grow As a prophylactic measure we should be very careful to find those cases of diphtheria in which the disease is confined to the nares with no other clinical manifestations When virulent diphtheria bacilli are found in the throat of healthy people, it means that those individuals at that time are not susceptible to the disease

Heart and Kidney Changes

DR R M PEARCE then exhibited by means of lantern slides, the changes found in the heart and kidneys, as determined by the investigation of the subject by Councilman, Mallory and himself The investigations proved that the heart muscle might undergo the various forms of degeneration, and the same was true of the kidneys In the latter organs hyaline degeneration was very frequently met with

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GERMAN CONGRESS OF INTERNAL MEDICINE

Held in Berlin, April 16 to 19

A very interesting feature of this congress was the scientific exhibit connected with it, which was restricted to diagnostic instruments and appliances It was a remarkable showing of what has been accomplished in this line, and was ably supplemented by a descriptive souvenir catalog, the work of Mendelssohn The first session was devoted to

Heart and Vasoconstricting Medicines

GOTTLIEB stated that he had succeeded in isolating the pulmonary circulation in living, warm blooded animals, and found that the action of the ventricle could be increased by the influence of digitoxin to three and four times its pristine energy The stronger systolic contraction of the heart is an important factor in the effect of digitalis The constricting action on the vessels is secondary, but it aids in the benefit derived Digitalis also stimulates the pneumogastric, and this has a tendency to retard the pulse, which also assists the favorable effect The blood is aspirated out of the veins more completely when the pulse is slow and regular Paralysis of the vessels from insufficiency of the central innervation as in case of infectious diseases, causes the blood to accumulate in the abdominal vessels, leaving the peripheral and cerebral vessels comparatively empty This condition requires a drug to act on the splanchnic vessels—not on the heart—and strychnin, caffein and camphor answer this indication and constrict the splanchnic vessels This can also be accomplished by counterirritation or cold applications to the skin Caffein has also a direct action on the heart, the reverse of digitalis It does not increase the functional energy, but reenforces the action of the heart muscle to overcome pathologic arterial resistance It may thus prove useful in heart affections with high aortic tension Alcohol dilates the peripheral vessels and diminishes the resistance, thus furnishing better conditions for the heart to work in Camphor has little action on the normal heart, but in experiments on rabbits in certain pathologic conditions, when the heart stopped beating the application of camphor revived it and restored its functions Sahli in his address described four varieties of stasis, although the sluggish circulation in the aorta is common to all, with consequent unequal distribution of blood throughout the system 1, the cardiac stasis, which may be due to insufficiency of the systole as well as to mechanical hindrance of the diastole of the heart, 2, respiratory stasis, in affections of the respiratory organs and intrathoracic effusions, 3 stasis due to dilatation of the capillaries, and 4, splanchnic stasis The latter is a stasis from primary vasodilatation chiefly in the domain of the splanchnic vessels The patients are pale and look as if they had been drained of their blood This stasis may occur alone or in combination with a serious cardiac stasis, such as is observed in aortic insufficiency The stasis should be diagnosed and treated at the first symptoms without waiting for complete development Treatment should be instituted when the pulse is frequent and traces of edema appear, with diminished urinary secretion and congestion of the jugular veins Digitalis is effective in all cases of generalized stasis and lowers instead of increasing a high arterial tension In some cases, however, its effect is nullified by an essential insufficiency, beyond compensation, of some valve Caffein and camphor are indicated in the stasis due to dilatation of the capillaries, "vasomotor stasis" Camphor is especially useful in sustaining the vital function in the course of infectious diseases Alcohol has a brief relaxing effect on the peripheral vessels and is indispensable during a febrile chill or in case of defective reaction to a cold bath These effects render it useful in certain cases of high tension, combined with digitalis or caffein Ewald administers digitalis in enemata or suppositories in case of gastric intolerance He considers morphin in certain circumstances one of the best heart tonics at our disposal Goldscheider reported excellent results from the administration of 1 to 22 cg of digitalis a day for months at a time Smith called attention to the injury caused by all stimuli that enlarged the heart The outlines of the heart should be supervised in athletic training He has found in a number of cases of neurasthenia, melancholia, hypochondria and depression hypertrophy of the heart as the cause or aggravating element, and after this had been cured the nervous affection vanished with it or was materially improved Hofmann reported tests on healthy persons showing that camphor, digitalis, cocain, belladonna, strophanthus and strychnin cause the heart to contract Narcotics—ether, lead acetate and alcohol—enlarge the heart. Schott stated that the Nauheim treatment, baths and exercise, raised the blood pressure in subjects that were benefited, but that the blood pressure was lowered in persons with advanced arteriosclerosis, myocarditis or aneurysms, which he considers contraindicate the treatment

Acute Myelitis

VON LEYDEN classified this condition as transverse or disseminated, and the acute or chronic form of poliomyelitis The direct agency of the streptococcus has been established, and myelitis is frequently preceded by la grippe It has also been observed consecutive to typhoid, panaris, angina, gonorrhea or trauma Ritter has witnessed six cases of myelitis in children consecutive to an infectious disease, and concludes from his experiments that ptomain poisoning was the cause in these cases A number of members reported the discovery of the ordinary streptococcus in cases of articular rheumatism and chorea, and Singer considers the disease an attenuated pyemia Mayer stated that he had induced a disease in animals inoculated with streptococci from 12 patients with acute articular rheumatism, which caused effusions in the joints and inflammation of the serous membranes with endocarditis in 17 out of the 89 animals Jaeger asserted that epidemic cerebrospinal meningitis is endemic in this country and that the cases occurring in Germany are imported from the United States Bier confirmed his previous announcement in regard to the pain soothing and bactericidal effect of congestive hyperemia combined with massage to promote absorption Arterial hyperemia with hot air has no bactericidal influence nor any action on the nervous system Hansemann reported three pure cases of syphilis of the lungs Kahlden asserted that traumatism is the most important factor in the genesis of porencephalia Rosenfeld described researches which showed that fatty degeneration is due to an immigration of the fat globules into the protoplasm of the cells This immigration cannot occur unless the cells are deficient in glycogen Consequently in his experiments with artificial fatty degeneration produced by phloridzin, he was able to prevent it by administering substances that supplied the demand for glycogen Wiener announced that he had established in birds a synthesis of uric acid from oxyketon and dibasic acids and that the same process probably occurs in man

Therapeutics.

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice Proper inquiries concerning general formulae and outlines of treatment will be answered in these columns]

Treatment of Indigestion

Dr J M G Carter, of Waukegan, Ill, in *Med Fortnightly*, states that where there is interference with digestion resulting from a hypersensitive condition of the mucous membrane of the stomach with a tendency to fermentation of the carbonaceous foods, he employs the following prescription

℞	Acidi carbol	gtt vi	4
	Tinct gelsemii (U S P)		
	Glycerini		
	Vini colchici, āā	℥ss	16
	Tinct opii camph	℥iss	48
	Elix simplicis	℥i	32

M Sig One teaspoonful before each meal and at bedtime

In the same journal are given the prescriptions for this purpose used by M Mathieu

℞	Tinct ipecacuanhæ		
	Tinct calumbæ		
	Tinct gentianæ, āā	m 75	5

M Sig From 15 to 30 drops after each meal in water

Or

℞	Tinct ipecacuanhæ	ʒiss	6
	Saccharin	gr iss	1
	Menthol	gr iv	25
	Alcoholis at 80 deg	℥x	40
	Syr simplicis	℥iv	128

M Sig Two to four teaspoonfuls after each meal

Soda Compresses in Suppuration

G E Vladimiroff, according to the *Phila Med Jour*, states that he has obtained splendid results from the use of soda compresses in diverse suppurative processes He has employed it in several cases included among which there were burns of second degree, burns of the third degree, suppurating processes, contused and incised wounds and suppurating lymphatic glands He employed it as follows 1 A layer of gauze saturated with a 2 per cent solution of soda was applied This was covered with a piece of oilcloth cotton and a bandage The compress was changed two or three times in twenty-four hours 2 The gauze next to the body was not saturated but kept wet with the soda solution by pouring on the solution three or four times daily 3 Several layers of gauze saturated in soda solution were placed over the suppurating surface, these were covered by a thick layer of boric acid and camphor salve, then a piece of oil silk, cotton and bandage Such a compress remained moist one or two days

Treatment of Chronic Arteritis

Boix, in V W *Lancet*, gives the following combination for chronic arteritis

℞	Hydrastiniæ hydrochlor	gr iss	10
	Sodii iodidi	gr xxx	2
	Aq destil	℥vi	192

M Sig Take two tablespoonfuls each morning The treatment should be suspended one week in each month

Local Application of Turpentine in Neuritis

Of the counterirritant effects of turpentine there can be no doubt Mircoli strongly recommends the local application of turpentine in neuritis resulting from exposure to cold, and in sciatica especially He recommends the following

℞	Terebenthinæ (Venetian)	℥i	32
	Dissolve in		
	Olei terebenthinæ	ʒii	8
	Olei olivæ	℥iss	48

M Sig Apply locally once or twice daily with friction

The resin remaining will exert a continuous action upon the skin after each application

Hemoptysis

Tuberculous hemoptysis sometimes proves so stubborn that the ordinary treatment will not prove efficient Lemoine, as noted in *St Louis Med Rev*, states that hemoptysis without fever is, as a rule, less grave He recommends absolute rest, horizontal position with the head slightly elevated, warm foot baths, active purgatives to bring the blood to the abdomen and extremities Sinapisms to the apices and bases of the lungs, oft repeated, and revulsion Internally he administers quinin and ergot Alcohol should be discarded In febrile hemoptysis ergot is not always indicated The following combination is recommended

℞	Pulv ipecac	gr xxx	2
	Syrupi ipecac	ʒx	40
	Syr aurantii	℥iii	96

M Sig One dessertspoonful every two hours until slightly nauseated

Suprarenal Capsule in Treatment of Hemoptysis

W B Kenworthy, in *Med Record* states a case which he had unsuccessfully treated for hemoptysis by the usual methods —administering opium, ergot, and gallic acid The extract of suprarenal capsule was then administered in three grain doses every half hour until three doses were taken then every two hours for six or seven days In a very few minutes after the first dose was taken the hemorrhage ceased entirely without return while under his care ten weeks later

Treatment of Gonorrhea

F P Dyer, of Boston in *Jour Med and Science*, states that he uses the following formula in all stages of gonorrhea, and reports several cases successfully treated

℞	Balsami copaibæ		
	Spts *etheris nitrosi* āā	ʒiv	16
	Spts lavendulæ comp	ʒiii	12
	Tinct opii	ʒi	4
	Syr simplicis	℥i	32
	Mucil acaciæ q s ad	℥vi	192

M Sig Shake One teaspoonful after each meal in milk

He calls attention to the fact that no alkalies enter into the composition of the above and by its omission irritation of the bladder is avoided He prefers protargol in 2 per cent solutions as an injection twice daily

Salt Solution for Intravenous Injection

Carwardine, as stated in *Operative and Pract Surgery* states that the surgeon should keep a bottle of sterilized salt solution more nearly approaching the composition of blood plasma than the normal salt solution made up from ordinary table salt It is composed as follows

℞	Sodii chloridi	ʒiiiss	14
	Potassii chloridi	gr xii	75
	Sodii sulphatis	gr c	6
	Sodii carbonatis	gr c	6
	Sodii phosphatis	gr viii	50
	Aq destil	℥viii	256

M Sig Sterilize and before using increase its bulk to two pints by the addition of water

Migraine

W Whitehead, in *British Medical Journal*, reports some very interesting cases of migraine which he successfully cured in every instance by means of the ordinary tape seton He grasps at the back of the neck between the finger and thumb of the left hand and then transfixes the skin with a scalpel and passes a needle or probe, with an eye, through the wound A piece of tape one half inch wide is then drawn through the wound Four or five inches of tape is left on either side of the wound and tied so that the tape can not be displaced The patient is ordered to move the tape in the wound from side to side each day This seton is allowed to remain continuously for three months If the migraine reappears at the end of that time another seton should be introduced Anesthesia with nitrous oxid for one half minute is sufficiently long for the operation

Chronic Otorrhea

℞	Potassii iodidi	ʒss	2
	Tinct iodidi	ʒvi	24
	Alcoholis	℥i	32
	Glycerini	ʒvi	24
	Iodoformi	ʒss	16

M Sig Inject into the outer ear daily —*Med Woch*

Treatment of Pruritus Ani

In an interesting article in *Internat Jour of Surgery*, J P Tuttle of New York state that the local treatment while simply palliative is of the utmost importance because of the necessity of giving the patient immediate relief By means of local application the itching and nervous conditions can be quieted He recommends hot water as one of the simplest, applied by the patient just before retiring as hot as can be borne This must be applied without rubbing or irritating the parts He recommends the following containing salicylic acid and glycerin as being the most efficient ointment in his hands

℞	Acidi carbol	ʒii	8
	Acidi salicylici	ʒiss	6
	Sodii biboratis	℥i	4
	Glycerini	℥i	32

M Sig Apply at bedtime and during the night if necessary

In cases where there is fissure or in those marked cases of atrophic catarrh the following is effectual

℞	Ext conii	ʒii	8
	Ung stramonii		
	Lanolini	℥i	32

M Sig Apply at bedtime and after stool

Treatment of Hemorrhoids

J P Tuttle as noted in *Amer Med* believes that in many acute cases of internal hemorrhoids local and general measures should be resorted to rather than operative procedures Cold water enemas once or twice a day are of great benefit in order to produce an easy movement of the bowels and to contract to some extent the blood vessels Injections of mild nonirritating astringents, such as the fluid extract of krameria, fluid extract of hamamelis or fluid extract of pinus Canadensis will have a very soothing and curative influence Suppositories of ichthyol, tannic acid and belladonna are of great benefit, especially if there is an eroded condition of the parts Resinous catharties, such as podophyllin, aloin, gamboge, etc, irritate the parts and should not be used Small doses of saline laxatives, especially sodium phosphate before breakfast, followed after breakfast by a cold enema, will have splendid effect upon the liver, intestine and hemorrhoids

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Medicolegal

Liability for Aggravation of Existing Diseases —The Supreme Court of Illinois holds in the case of the City of Rock Island vs Starkey, an action brought by the latter party to recover damages on account of an injury alleged to have been received by falling on a defective sidewalk that if, prior to the injury the woman had diseases which were aggravated by the fall, she might recover from the city, but its liability would be measured by the damages which were the natural and proximate result of its negligence It adds that the evidence tended to show something more than a mere latent tendency to particular diseases, and holds that if there was an aggravation of the existing diseases the city would only be liable for what resulted from the fall

Death from Lightning Conveyed by Telephone Wire — In the case of Griffith administrator vs the New England Telephone & Telegraph Company the Supreme Court of Vermont affirms a judgment holding the telephone company liable for the death of a physician struck by lightning while sitting in his library intently reading under a telephone instrument It holds that the duty of the company, in undertaking to maintain an instrument in the doctor's house for his use was to exercise the care of a prudent man in like circumstances in selecting, placing and maintaining in connection with its wires and instruments, such known and approved appliances and ground connections as were reasonably necessary to guard against accidents from lightning striking its telephone line and passing along its wires Whether the doctor was in the exercise of due care at the time it says was for the determination of the jury

The Phrase 'Wholly Disabled' in Accident Insurance — The Supreme Court of Nebraska holds in the case of Coad vs the Travelers Insurance Company that where a person is insured against being wholly disabled from transacting "any and every kind of business pertaining to his occupation" the phrase "wholly disabled" should be given a reasonable and practical construction so as to carry out the intention of the parties and give to the insured the protection contracted for But if an injury received by the assured renders him less capable of performing the duties required in the conduct of his business yet notwithstanding the same he is able to devote substantially all of his time to the business and to do practically all kinds of work and perform all necessary acts for the prosecution thereof and accomplish substantially, results of the same character as before the injury the court does not consider that he is wholly disabled within the meaning of the contract of insurance Nor does it think that he is so disabled, within the meaning of the policy, where there are different branches of the business pertaining to the occupation in which he is insured the prosecution of one of which may be prevented by the injury and yet the other engaged in prosecuted and carried on

Testimony not Amounting to a Waiver of Privilege — The third appellate division of the Supreme Court of New York says that, while on the witness stand the plaintiff in the personal injury case of Fox vs the Union Turnpike Company detailed her alleged injuries, and stated without reserve her feelings and all the alleged consequences of the injuries but she did not attempt to give the conversations with the physician called to treat her after the accident, or detail what, if anything, was done by him The only evidence given by her on her examination with reference to what was said and done by the physician when he was called other than that he gave her internal remedies, which she used, was brought out by the defendant on cross examination It was as follows "What did the doctor do for you then? A He examined my back and examined me He ordered alcohol Q What did he give you? A He gave me some medicine That is all I can tell you Something in a glass, two or three different kinds" The court holds that the plaintiff's testimony was not an express waiver of the statutory prohibition against disclosures by a physician It says that when a patient voluntarily opens the door of the consultation room, and gives a view that may have been specially arranged for the purpose it would not be in accordance with the spirit of the statute or in the interest of truth to shut the door against a view to be described by the physician, but in this case the door was not opened by the plaintiff Further, it says that the prohibition contained in the statute against disclosing professional information is for the purpose of allowing greater freedom between physician and patient, and a patient should not be subject to the penalty of waiving entirely the prohibition if she gives to a friend, or as a witness in an action or proceeding in court, a general statement of her injuries, and the claimed consequences of the same The determination of the question of an express waiver depends very largely upon the extent to which the patient in her testimony has entered into the details of the consultations with her physician

Validity of Law and Procedure to Revoke Certificate — The Supreme Court of Rhode Island holds constitutional, in the case of the State Board of Health vs Roy, section 5 of chapter 165 of the General Laws of Rhode Island which section provides that the State Board of Health may refuse to issue a certificate to practice medicine to any individual

guilty of grossly unprofessional conduct of a character likely to deceive or defraud the public, and may after due notice and hearing revoke a certificate for like cause, in all cases of refusal or revocation the applicant to have the right of appeal to the appellate division of the supreme court, which may affirm or overrule the decision of the board It does not think that it violates the constitutional provision that the judicial power of the state shall be vested in a supreme and inferior courts, even if the State Board of Health be only an administrative board, and not a court or judicial body It says that the way provided to determine, in the first instance, whether a trial before the appellate division of the supreme court is desired, is speedy and inexpensive He whose application for a license has been refused, or whose license is proposed to be revoked can have a judicial trial without terms or condition, by taking an appeal, which is practically for the asking, and then his case is tried in full before the highest court in the state If the State Board of Health decides in his favor, he gets all he asks, with little trouble and expense If the decision is not in his favor, he gets for the asking a trial before the highest tribunal in the commonwealth It is difficult to see how his rights could be better protected The appeal vacates the proceedings before the board so far as results go, and brings the matter up before the appellate division *de novo* or anew for trial as fully as though it had never been heard before the board, save that the original charge or petition remains as the cause of trial, and save also, that before it can be so tried before the appellate division it must have been brought before the board Hence, mere errors in proceeding do not afford ground for overthrowing or annulling the whole proceeding, so that an appeal provided to correct such errors can not be prosecuted Nor does the court think there is any conflict with the constitutional guaranties that no one shall be deprived of life, liberty or property unless by the judgment of his peers, or by the law of the land, or be denied the equal protection of the laws Moreover, while it says that it is axiomatic that one can not judge in his own case, the court points out that the complaint in this case was not made by any member of the board, *ex officio* or otherwise and says that if the secretary as personally interested in the complaint, he can not vote upon it, and, if he is officially interested merely (if such a distinction can be taken), his action is similar to boards of aldermen in various health matters where they originate the proceedings which may be appealed from, and it has never been supposed that their so doing was a cause for quashing the proceedings And the court holds that if a person obtains his certificate to practice medicine by misrepresentation and fraud in palming off upon the State Board of Health a diploma issued to another as one issued to himself, he is guilty of conduct likely to deceive and defraud the public by inducing the public to believe that he is lawfully entitled to practice medicine by reason of the possession of qualifications that would honestly entitle him to the certificate, conduct grossly unprofessional, which is continued every time he practices medicine under the pretended authority of such certificate No answer of the board to an appeal is required, and one is simply nugatory

Current Medical Literature

Titles marked with an asterisk (*) are noted below

Medical News (N Y), May 11

1 *Practical Food Prescribing Floyd M Crandall
2 *Studies in the Bacteriology of Typhoid Fever, with Special Reference to its Pathology, Diagnosis and Hygiene Philip Hanson Hiss, Jr
3 Restoration of Useful Vision in a Complicated Case of Acute Inflammatory Glaucoma of Ten Days' Duration with Visual Acuity Reduced to the Perception of Light C A Veasey
4 Rupture of the Right Kidney, Nephrectomy, Recovery G R Trowbridge

Philadelphia Medical Journal, May 11

5 *The Doctor s Fee—A Plea for Honorable Dealing John B Roberts
6 *The Etiology of Arrested Mental Development Pearce Bailey
7 Cataract Extraction Edward Jackson
8 Abscess of the Orbit from Disease of the Ethmoid Curetting Through the Orbit and Draining Through the Nose George C Harlan
9 Purulent Choroiditis, Following an Attack of Mumps, Diagnosis, Metastatic Choroiditis, Revised by Study of the Enucleated Eyeball John T Carpenter
10 Spontaneous (?) Rupture of the Spleen Laparotomy—Death —Report of Case D C Howard
11 Ephemeral Insanity with Report of Two Cases Charles J Aldrich

American Medicine (Philadelphia), May 11

12 *The Necessity for Greater Conservatism in the Use of Vasodilators in Certain Cases of Cardiovascular Disease Louis F Bishop
13 Aneurysm of Ascending Aorta of Great Size Treatment by Gelatin Injections and Electrolysis, with Effect of Coagulating Most of the Contained Blood W W Johnston
14 *Postpartum Metastatic Panophthalmitis, with a Clinical and Pathologic Study of a Case Walter L Pyle
15 A Preliminary Note upon Hydrocyanic Acid Gas as a Disinfecting Agent John S Fulton
16 *The Food Value of Alcohol and Professor Atwater s Experiments and Teaching (Concluded) John Madden
17 *A Case of Double Bladder, each with a Separate Ureter A Study of the Urine from Each Kidney E P Hershey
18 Transfusion, Infusion and Autotransfusion G W Wagoner
19 Litholapaxy in a Child Four Years old, with an Improvised Evacuator Gwilym G Davis

New York Medical Journal, May 11

20 *Atonia Gastrica and a New Method of Treatment A Rose
21 What Constitutes Sexual Intemperance W J S Stewart
22 *The Pathology, Diagnosis, Special Prophylaxis and Treatment of Tuberculosis of the Skin John A Fordyce
23 *Primary Chancre of the Septum of the Nose W Freudenthal
24 *Syphilis of Nervous System B Onuf
25 Acute Strangulated Femoral Hernia on a Porto Rican Hillside P R Egan

Boston Medical and Surgical Journal, May 9

26 Some Reported Cases of Typhoid Fever Attributed to Contaminated Oysters with Certain Facts Concerning this Means of Infection Charles Harrington
27 *Experience with the Widal Reaction in Typhoid Fever Charles F Withington
28 *The Widal Reaction in Typhoid Fever George B Shattuck
29 Means of Infection in Typhoid Fever E N Whittier
30 Early Diagnosis of Typhoid Fever by Isolation of Bacillus Typhosus from Stools Conclusions of Dr L Remy Based on the Use of His Asparagin Lactose Carbol Gelatin Calvin G Page
31 *The Fevers of the Philippines Joseph J Curry

Medical Record (N Y), May 11

32 *The Toxic Origin of Neurasthenia and Melancholia M Allen Starr
33 Potain's Simple and Accurate Method of the Percussion of the Heart with Postmortem Verifications George M Converse
34 *The Treatment of Pneumonia, Including the Hypodermic Injection of Saline Solution F Neuhoff
35 *Syphilis in the Well to do J A McDonald
36 *Subarachnoid Spinal Cocainization as a Means of Inducing Surgical Anesthesia Edward N Liell
37 Keloid Formed upon a Vaccination Scar Frederick Griffith
38 A Successful Pylorectomy on a Man in His Seventy first Year Alfred King
39 Postural Treatment in Threatened Miscarriage Alice M Smith

Cincinnati Lancet-Clinic, May 11

40 "Pus in the Pelvis" F M Barden
41 *Important Points Concerning the Dosage of Antitoxin M D Rabenoyich

St Louis Medical Review, May 11

42 *Schnetter's Placenta Forceps E, J Kempf
43 Serotherapy and Cytotherapy H Vaquez

American Practitioner and News (Louisville, Ky), March 15

44 Some of the Features of Health Administration M K Allen
45 Affections of the Eye and its Appendages in Bright s Disease William Cheatham
46 A Case of Sepsis J M Adair

Medical Age (Detroit, Mich), April 25

47 The Duty of the Public to the Medical Profession F R Sturgis
48 Diabetic Gangrene, Amputation Recovery August Schachner
49 Mercurol Inunctions Preparatory to Skin Grafting in Leg Ulcers William R Stone
50 *Briefs on the Surgery of the Genito urinary Organs G Frank Lydston

Northwestern Lancet (Minneapolis), May 1

51 A Case of Multiple Neuritis Christian Johnson
52 Two Months Surgical Service in the Minneapolis City Hospital I F Moore
53 Thrombosis of the Vena Cava Inferior C H Hunter

Pennsylvania Medical Journal (Pittsburg), April

54 *Paralysis Agitans without Tremor Augustus A Fshner
55 Leukemia and Pseudo leukemia Charles H Miner
56 Traumatic Hysteria and Neurasthenia Edward I Mayer
57 *The Easiest Quickest Safest and Most Thorough Method of Removing the Third Tonsil Louis J Lautenbach
58 Living Animal Organisms in the Ear Francis R Packard
59 The Operative Treatment of Ugly Ears John B Roberts
60 Typhoid Fever Concisely Considered James Fulton
61 A Case of Resection of Four Feet of Small Intestines Geo D Nutt
62 *The Treatment of Cicatricial Stenosis of the Esophagus with Particular Reference to the Method of Koenig Chas H Frazier
63 *The Climatology of Neurasthenia I Savary Pearce
64 Relation of the Oculist and Optician to the Profession and Public P I Kress

Canadian Journal of Medicine and Surgery (Toronto), May

65 Treatment of Morphinism T D Crothers
66 Adrenalin the New Hemostatic Murray McFarlane
67 *The Protozoon of Cancer Harvey R Gaylord
68 1 Thoracic Aneurysm 2 Carcinoma of Superior Maxilla 3 Cholelithiasis and Suppurative Cholecystitis 4 Inguinal Hernia of (a) Bladder (b) Cecum Bern B Gallaudet
69 *The Carbohydrates of the Urine in Diabetes Insipidus David L Edsall
70 Laryngeal Hemorrhage from an Apparently Normal Larynx George B Wood
71 *Blastomycetic Dermatitis of the Gluteal Region Frederick G Harris
72 Subinvolution of the Uterus Three Suggestive Cases F W Atlee

American Medical Compend (Toledo, Ohio), May

73 Ulcerative Keratitis Charles Lukens
74 Meningitis with Special Reference to Lumbar Puncture and Kernig's Sign Elizabeth Woods Bowman
75 Sesamoid Bones and Floating Cartilages H I Green
76 Croupous Pneumonia Followed by Pulmonary Gangrene with Report of a Case G Aftel
77 Nutrition and Disease A T Cuzner

Medicine (Detroit Mich), May

78 Experimental Digestive Plague D MacDonald
79 *Clinical Observations on Protargol with a Résumé of the Literature Max Reichmann
80 Chloretone Anesthesia as an Aid in Subarachnoidean Operations William R Stone
81 *Three Cases of Osseous Stylohyoid Arch Thomas R Crowder
82 The Malarial Causation of Cranial Nerve Paralysis With a Case Louis R Morris and Allan McL Hamilton

Louisville Monthly Journal of Medicine and Surgery, May

83 Welcome Address Delivered before the Morganfield District Medical Association P B Miller
84 The Gonococci in the Gonorrheal Secretion A Ravogli
85 Acne and its Treatment Henry H Koehler
86 Practical Things About Typhoid Fever W J Leach
87 Emergency Hospital at the Pan American Herbert Shearer

Obstetrics (N Y), April

88 *Indications for the Cesarean Section in Placenta Previa G M Boyd
89 *Pregnancy in the Accessory Horn in the Uterus Duplex (Concluded) Erwin Kehrer
90 The Prevention of Puerperal Eclampsia L F Bennett

Kansas City Medical Index-Lancet, May

91 Recto colonic Enteroliths and Concretions Samuel G Gant
92 Medicine a Progressive Science John M Langsdale
93 Stones in the Common Bile Duct A H Cordier

Archives of Otology (New Rochelle, N Y), April

94 *Electrolysis in the Destruction of Organized Strictures of the Eustachian Tube Joseph A Kenefick
95 Acute Otitis Media Cerebellar Abscess Operation Death from Meningitis Wendell C Phillips
96 Mastoiditis Complicated by Paralysis of External Rectus Kasper Pischel
97 Acute Mastoiditis Thrombosis of Lateral Sinus Perforation into Pharynx Kasper Pischel
98 Skin Flap for Immediate Closing of Wound in the Radical Mastoid Operation Kasper Pischel
99 *The Diagnosis and Treatment of Otitic Meningitis Dr Hinsberg
100 Primary Otitis Externa from a Clinical Point of View C J M Schmidt
101 Topographic Anatomy and Operative Technique of Otitic Abscess of the Temporal Lobe H Preysing

Medical Mirror (St Louis), April

102 *Nutrition and Stimulation I N Love
103 The Relation of Appendicitis to Diseases of the Uterine Appendages Albert I Bohnn
104 A Case of Resection of Caput Humeri for Subcoracoid Dislocation—Recovery with a Useful Arm Valdemar Fleth
105 The Most Potent Mercurial Preparations for specific Diseases Frederick S Mason
106 Autoinfection in Disease and Individual Prophylaxis J C Shrader
107 Autointoxication from Renal Insufficiency with and without Diseased Kidneys with Report of Some Remarkable Cases James F Jelks
108 A Case of Pernicious Malarial Fever Nevil M Garrett
109 Some Points of Practical Importance in the Symptoms and Treatment of Acute Pneumonia Dr Babcock
110 *Hypospadias C H Mayo

Brooklyn Medical Journal, May

111 *The Genesis of Uric Acid R H Chittenden
112 A Case of Transperitoneal Ligation of the External Iliac Artery for Femoral Aneurysm Russell S Fowler
113 A Résumé of Present Knowledge Concerning Water Purification and Some Comments Relative to the Needs of the Brooklyn Water Supply George W Fuller
114 Sanitary Condition of the Brooklyn Water Supply Based on Work of the Rockville Center Laboratory of the Brooklyn Health Department 1896 1897 Hibbert W Hill

Toledo Medical and Surgical Reporter, May

115 Hospitals of Europe Christian Storz
116 A Case of Hydramnion F A Leslie
117 Chloretone in the Treatment of Epilepsy F W Hammond

Journal of Eye, Ear and Throat Diseases (Baltimore), March-April

118 Protargol Some of its Uses in the Nose and Throat Wilbur F Skillman
119 *Pathology of Deaf Mutism J J Carroll
120 A Method of Preserving Eye Sections in Museum Jars J William Watson

Mississippi Medical Record (Vicksburg), May

121 Some Surgical Cases (Sarcoma etc) J A Crisler
122 The Pathology of Adenoids in the Adult A T Mitchell
123 Some Interesting Items (Abscesses etc) J C Ballard
124 Accidental Impregnation John Darrington

Laryngoscope (St Louis), April

125 *The Pathology of Pharyngomycosis with Lantern Slide Illustration B Braden Kyle
126 *On Sounding and Irrigating the Frontal Sinus Through the Natural Opening Walter A Wells
127 Primary Carcinoma of the Nasopharynx Report of a Case Chevalier Jackson
128 Gummous Tumor in the Larynx in a Boy Six Years Old Due to Latent Hereditary Syphilis Gottlieb Kiner

Nashville Journal of Medicine and Surgery, April

129 The Medical Society—Its Advantages to the Profession and its Value to the Public J A Crook
130 Surgery in Country Practice with Report of a Case of Fracture of Skull—Loss of Brain Substance A M Chittenden

New Orleans Medical and Surgical Journal, May

131* Disinfection from a Purely Practical Point of View—Its Efficiency a Problem for Solution John J Archinard
132 Dermoid Cyst of the Scalp with Report of a Case Sydney P Delaup
133 Lung Infarction and Pneumonia in Cardiopathies—a Case with Post mortem Examination E M Dupaquier
134 Chronic Gastritis with Erosions—A Clinical Lecture Otto Lerch
135 Traumatism of Eye—Discrepancy Between Cause and Effect Drs Burns and Robin
136 A Needle for Silver Wire L J A Genella

Medical Standard (Chicago), May

137 Appendicitis and its Treatment A J Ochsner
138 Chronic Constipation David Paulson
139 Drug Habits and their Treatment T D Crothers
140 Epistaxis its Causes and Treatment Aime Paul Heineck
141 Membranous Croup William F Waugh
142 A Neurological Clinic Daniel R Brower

AMERICAN

1 **Infant Feeding**—Crandall's article treats the subject generally gives tables for prescribing the proper amount of fats, proteids, sugars etc, in the milk, and advises beginning feeding with weak mixtures, which, however, are not to be con

timed He objects to the changing of foods under slight provocation If the child becomes actually ill it is best to dilute If indigestion or diarrhea occurs, stop milk, as diarrhea is usually a bacterial trouble Chronic indigestion with beaded ribs and sweating of the head in sleep suggests rickets Painful joints and purple gums suggest scurvy and its proper treatment Eczema is sometimes relieved by reducing the fat, while constipation with hard dry stools may sometimes be helped by increasing it Colic, flatulence, and restlessness are indications for the reduction of percentage proteids Regurgitation of food with perhaps small frequent passages suggests excessive fat, while green acid stools, with gas and colic suggest an excess of sugar Curdy stools call for more dilution of the top milk Foul stools call for thorough washing and reduction or stopping of milk

2 **Typhoid Fever** —From a study of a number of cases of typhoid fever in the New York hospitals, examination of stools, etc, Hiss offers substantially the following general conclusions 1 Usually after the first week bacilli can be found in the blood, spleen, rose spots, urine and feces and in rarer instances in the secretions of exudates of the mouth, throat and lungs After death the bacilli are demonstrated here and in other locations, such as the lymphatic tissues of the intestine, mesenteric glands, bone marrow, lungs, gall bladder, etc 2 The bacilli apparently do not thrive or even survive long in the circulatory blood They may, however live and multiply at some of the points where they are deposited by the blood and lymph thus forming bacterial foci 3 Morphologic examination of tissue secretions to determine the relations of bacilli to lesions of the bacilli of typhoid have generally proven unsatisfactory and inconsistent Some of the lesions undoubtedly occur at points remote from the bacilli, others, it is probable, are intimately associated with them and it is not unlikely that certain lesions occur only at points of localization of bacilli 4 Typhoid is therefore an infectious disease with wide dissemination, and multiple localizations of the bacilli are frequently demonstrable during life and after death During the disease various tissue changes take place some necrotic and others hyperplastic and while some are remote from inciting organisms, other facts point strongly to the close association of the germ with some of the more characteristic lesions 5 There is a close connection at least between the appearance and disappearance of bacilli in the intestinal contents, and the appearance of and repair in the intestinal ulcers The organisms are very rarely demonstrable in stools before the first days of the second week, and disappear with the fall of the fever While the intestinal tissue destruction is most active, they can be isolated with great regularity When continuously absent in typical cases, it probably indicates the scarcity or absence of intestinal lesions 6 The urine in a certain percentage of cases contains the bacilli These are found near the end of the second week, and they may not appear here until very late in the disease or during convalescence, and may persist, it is claimed, for months, and are generally associated with albuminuria He dwells on the importance of disinfection of the urine, which is often a source of infection, and of the feces in the later stages, and of the expectoration on account of the chance of the bacilli being present in the mouth All eating utensils should also be disinfected

6 **The Doctor's Fee** —Roberts' article is a protest against certain practices which are more or less common and certainly objectionable, such as collusion with manufacturers and druggists and insurance companies, which are not always honorable in their dealings, the writing of articles for drug companies, the division of fees by consultants and surgeons and excessive charges, especially those made against estates of deceased In this latter point he goes at some length and claims that the professional spirit has been somewhat debauched by mercenary considerations, and that courts are often justified in treating with suspicion large bills that are presented He says there is but one just plan by which the fee should be regulated, that is, the doctor should have an estimate of the value of his services fixed in his mind, not too low nor too high, and that the wealthy patient should pay the full fee and it should be generous in order to recompense the physician for his experience, education and hazardous life The fee should not always be increased, however, because his services are utilized by a very wealthy person, unless an unusual time is given to services or additional responsibility is placed upon the physician by reason of the patient's position

6 **Arrested Mental Development** —Causes of degeneracy, idiocy, etc, are classed by Bailey under three heads Those occurring before birth, at birth, and during infancy and childhood Among the first he includes heredity, alcoholism of parents, tuberculosis, syphilis, etc Among the second he briefly mentions cerebral injuries at birth The causes occurring after birth are the most important, inasmuch as a child's brain is vulnerable as a whole to injuries and the lesions are not localized as in adults A foremost place among them is occupied by post natal diseases of the brain and its membranes, such as hemorrhages, meningitis, infectious fevers, intestinal intoxication, defects of the senses, etc Traumatism plays but a small part but nutrition is of great importance A large number of feeble minded children are rhachitic, and in this class are included also faulty conditions of metabolism, known as cretinism and amaurotic family idiocy Chronic alcoholism is also more serious and frequent than is perhaps believed, and due to parents giving beer and wines to their children While these various causes enumerated vary greatly in frequency and importance some of them merit much more detail than he has been able to give to them All of them are worthy of special consideration and teach important lessons to those who wish to have children and to those whose duty it is to care for them

12 **Cardiovascular Dilators** —According to Bishop there is too much tendency to the routine use of cardiovascular dilators in certain cases of cardiovascular disease, and they are now given in such a way often that no effect whatever is produced A careful regulation of the dose is required for their final action may be paralysis and dilatation of the heart through a complete breaking down of inhibition It is important, when the nitrites are used, to have a reliable preparation, which is not always the case and the case must be studied from time to time with withdrawal of the drugs and substitution of others of a different class Cardiovascular disease is particularly remote from the ideal of treatment by specifics The whole management is like the running of an intricate machine, the physician must study and learn all its resources No permanent course of management can be planned for in a single case He mentions a particular form of pulse where nitroglycerin is not as valuable as other drugs This is a high tension pulse with persistent rapid heart's action In such cases the greatest benefit is sometimes derived from digitalis It theoretically does not act, but practically it does Even when tension does exist in cardiovascular disease with nephritis it should be realized that some tension may be desirable As time goes on the greatest danger to be feared is too great lowering of the blood tension with its accompanying condition In the presence of symptoms indicating disturbances of the cerebral circulation, such as numbness or awkwardness of one of the extremities or speech disorder, the vascular dilators are imperatively needed Sodium iodid has also an undoubted power to control these conditions Bishop believes that with a properly planned regime, and careful medication and other therapeutic measures, the heart may recover its tone so that all symptoms of degeneration disappear and the kidneys settle down to their work sufficiently well to maintain health

14 —See abstract in THE JOURNAL of March 30, p 911

15 **Hydrocyanic Acid Gas as a Disinfectant** —The danger of hydrocyanic acid gas is not considered so great by Fulton as commonly supposed He says he has lost some of his fears of its imputed energies, though its real power must always be respected He gives the details of disinfection experiments with the gas, produced by the action of sulphuric acid upon potassium cyanid Against organisms no hardier than diphtheria and typhoid bacilli hydrocyanic acid gas is about as effective as formaldehyde, though a greater amount

of gas is required and perhaps more time One gram of cyanid per cubic foot of space is probably the correct proportion It has no great power of penetration and Fulton thinks that a gaseous germicide with great penetrating power is as yet a desideratum Against animal life it has a strong diffuse energy and can destroy insect life completely He thinks it not unlikely that it may be to some extent made to meet the need of a gaseous germicide which will also become a destroyer of animal life

16 **Alcoholism** —In this conclusion of his criticism of Atwaters views, Midden says testing alcohol by the requirements of a food viz, the lack of irritating effects and the orderly liberation of energy what do we find? In the first place on all hands it is recognized as an active protoplasm poison so active indeed that less than a fourth as much as is necessary to furnish the tissues with fuel may be taken daily without tissue derangement being universally apparent, and but a very little more than enough to supply the tissues with their daily needs of fuel has been found sufficient to destroy life when taken in a single dose Does it need a technical education to determine whether any poison so violent as this shall be called a food or not? It seems that very few facts in science admit a clearer demonstration than that alcohol is not a food Its destructive properties alone are sufficient to at once and forever bar it from the lists of food of any class He says many other poisons contain a large amount of latent energy which is usually set free in the body—phosphorus ptomains etc, are of this class and he asks whether we should utilize these with alcohol?

17 —See abstract in THE JOURNAL of March 16, p 756

20 **Atonia Gastrica** —The new method of treatment suggested by Rose consists in the use of a bandage 36 by 12 inches applied tightly around the abdomen drawing it well upward the two ends meeting or overlapping at the spine The plaster should not include the crest of the ileum but should run closely along and above it The support of the abdominal walls is made perfect by additional applications of two side pieces, extending from the hypogastrium over the inguinal and iliac regions and reaching also to or near, the spine In the application of these pieces considerable force may be used He has a record of about 100 cases in which he has made use of this treatment and in which it gave most marked and prompt relief in a high degree of gastroptosis in which reflex cough and vomiting were among the symptoms The majority of his patients were dispensary cases working people, and in very few was there ever complaint of any inconvenience or irritation of the skin

22 —See abstract in THE JOURNAL xxxv p 1172

23 **Primary Septal Chancre** —Freudenthal, after noticing the various types of primary facial lesions and their causes describes a case in a physician where there was primary chancre of the nasal septum due to finger infection The patient had suffered from a dry ulceration and the formation of crusts and it was in getting rid of these that the nasal infection was produced He thinks there are many cases of this sort which for obvious reasons are not published

24 **Nervous Syphilis** —Onuf reports the manifestations of syphilis of the nervous system with special reference to diagnosis, calling attention to cutaneous symptoms eye symptoms and those of the internal organs He reviews the different forms in which they may occur and points out a few symptoms that are somewhat characteristic, though not pathognomonic of these states, such as irregular contraction of pupils pin head pupil vertigo etc The prognosis and treatment are also briefly discussed

27 **Widal Reaction** —In 253 cases of typhoid during six months of the year 1900 there were only 10 failures of the Widal reaction but besides these there were 6 other cases in which the diagnosis of typhoid was made through evidence that was not directly conclusive In these there were repeated negative Widals Including these Withington says, as we might we would have a total of 259 with failure in 16 or a little over 6 per cent In one case after eight consecutive failures the test was positive for the first time on the twenty ninth day

28 **Widal Reaction** —The same subject is taken up by Shattuck who compares his own experience in a former published article and reports certain interesting cases

31 **The Fevers of the Philippines** —Curry gives in this paper a preliminary report of the fevers met with among the troops in the Philippines Typhoid fever he thinks, previously existed amongst the Spaniards and natives though to what extent it is impossible to say He thinks there is danger in the future when the camps become more permanent, that typhoid may increase and the prevalence of the disease in the Philippines be a serious problem Malta fever was also observed, and he points out that it is probably not uncommon The name is unfortunate as indicating a localized disorder whereas it seems to be met with in various other Mediterranean countries, in India Hongkong and Porto Rico The malarial fevers of the Philippines differ slightly from other tropical countries in the greater prevalence of the tertian form Malarial fever often complicates other diseases, the parasites are the same as those known the world over He also mentions certain undetermined tropical fevers which are still open to investigation Among these there is a fever described by Munson as double continued fever, which closely corresponds with Malta fever and a so called "hepatic fever"

32 —See abstract in THE JOURNAL of May 11, p 1340

34 **Pneumonia** —The following are Neuhoff's conclusions in regard to saline infusion treatment in acute croupous pneumonia It is a useful adjunct to other treatment in selected cases It acts as a powerful heart stimulant when other heart remedies can no longer sustain the flagging circulation It increases the secretions and moistens the tongue and throat as well as the skin It lessens the delirium Other observers have noticed that it also improves the respiration ,but of this I could not convince myself It is contraindicated in pulmonary edema Some patients apparently die of collateral pulmonary edema not consequent on a failing heart In these saline infusions were not applicable Others apparently died from heart failure or edema caused by heart failure Here the infusion averts the tendency to death by sustaining the heart as nothing else can

35 **Syphilis in the Well to do** —McDonald believes that syphilis is a less formidable disease in the well to do, especially as regards its later symptoms From an analysis of 150 consecutive cases in which there were 3 per cent of hereditary cases he found the mortality in the hereditary 40 per cent In the acquired cases 65 per cent had only mild trivial, transitory lesions, without leaving any traces, 6 per cent, suffered severely but recovered completely without perceptible impairment of any organ 20 per cent suffered from gummata, which left scars but which were readily amenable to treatment and healed up satisfactorily Only 6 per cent were formidable and not a single case was appalling He attributes this to a greater attention to the early treatment and cleanliness and the milder form of the disease acquired, with the precautions taken by the patient and maintains that syphilis in the well to do is a different disease from syphilis in the poor

36 **Subarachnoid Spinal Cocainization** —Liell has looked up the statistics of spinal cocainization and believes that this method of analgesia has passed the experimental stage, and that we are justified in hoping that it will find its field of practical usefulness in the near future along with ether, chloroform and nitrous oxid

41 **Antitoxin** —The special object of Rabenovich's article is to emphasize the fact that every case is a rule unto itself as to the amount of antitoxin required The proper dosage can not be laid down and the symptoms and signs of the disease must guide The writer has found a preliminary injection of never less than 3000 units advisable and the total dosage may be carried up to even 50 000 or more The only guide is a shrivelling up of the membrane and disappearance of constitutional symptoms A number of cases are reported as illustrating his views

42 **Schnetter's Placenta Forceps**—This instrument, which is described by Kempf, consists of a canula, 7 inches long, in which is a rod with a handle at one end and a fenestrated forceps in the other The blades of the forceps are one half inch wide and are fastened to the rod by a steel spring The instrument is introduced into the uterus closed and the handle then pushed up into the canula, which opens the forceps When rotated it acts as a double curette and scrapes all the loose placenta in the center of the forceps If the forceps is gradually closed there is no danger of catching the sides of the uterus When a portion of the placenta has been caught further rotation will peel off the remainder and get it all without tearing it The instrument is capable of being thoroughly aseptic'zed and Kempf claims it of great value in certain cases He does not know who Schnetter, the inventor, is, but thinks the instrument should make him famous

50 **Hydrocele**—Lydston's method of treating hydrocele is by complete excision of the entire sac of the tunica vaginalis under aseptic conditions He gives his technique in detail, and remarks that it often cures the chronic indurations and enlargements of the testis and epididymis so frequently associated with hydrocele and permits also an excision of tubercular foci small cysts etc The stitching of the superimposed tissue in two distinct layers and the formation of a pseudo sac are he believes, efficacious in preventing adhesions of the skin with subsequent tenderness and possibly neuralgia

54—This article appeared in THE JOURNAL of February 16, p 422

57 **Adenoids**—Lautenbach objects to anesthesia in the removal of the third tonsil, and insists first on making a digital examination He does not use a gag in the child's mouth, but wrapping the index finger with one or two layers of adhesive plaster, he then puts over this two or three turns of double flannel roller bandage If he finds the expected growth, he proceeds to gouge it out with the nail of his index finger, removing every shred and being careful to see that the fossæ of Rosenmuller as well as the Eustachian tube orifices are perfectly clear, or that the finger nail can not remove the parts When he can not get rid of all parts with the normal organ, he uses his artificial finger nail He says that the finger feels just what we are doing and we know just when to stop The rapidity with which the operation can be done is almost inconceivable, and there is not the added danger of the anesthetic Since he has used this forefinger operation he has found recurrences to be very rare

62 **Esophagal Stenosis**—The treatment of cicatricial stenosis of the esophagus is described by Frazier, who mentions the instruments, especially the silver balls of graduated sizes, which he employs to dilate strictures where the bougie can not be used He has the patient swallow the smallest of the threaded balls, the attached string being fastened to the coat or ear, and retain it for twenty four to thirty six hours or more, when it will be generally found to have passed the stricture, then other sizes are gradually utilized up to 6 or 7 mm in diameter and suitable treatment conducted on the lines laid down for permeable strictures He sums up that the plan of treatment to be adopted can be decided on only after very careful explorations and draws a close analogy between the treatment of these strictures and those of the urethra Forcible measures he thinks, are unnecessary and may be serious in their results The first class is the permeable stricture admitting the passage of the bougie and should be treated by gradual and intermittent dilatation The frequency with which the bougie should be passed will depend on the tolerance and the limit to which it should be dilated, as in children 18 mm and in adults 22 mm The best adapted instrument is the fine conical tipped rubber bougie Class 2, or the intermittent class, is composed of those strictures where attempts to pass a bougie have failed, and here the silver ball treatment comes in and should be followed if successful, by gradual dilatation Class 3 includes the absolutely impassable strictures or those not included in the first and second classes These are to be subdivided into those in which the passage may be effected by approaching the stricture through the stomach, and of which retrograde dilatation rapid or permanent, or division with a string by Abbe's method, followed by rapid retrograde dilatation, is the proper mode of procedure, and 2, those in which the passage through the stricture can only be effected by external esophagotomy, the stricture is divided either by Abbe's method or by cutting it from without inward, as by external urethrotomy Class 4 is composed of those very exceptional cases which have proven absolutely impassable Here gastrotomy with the establishment of permanent fistula is to be recommended

64 **Neurasthenia**—According to Pearce there are two extremes to be avoided by the neurasthenic individual, viz, the low, windy treeless country, and the one characterized by constant quiet atmosphere, high altitude—above 2000 feet—with low atmospheric pressure An illustration of the former condition is found in Portland Ore, where neurasthenia is very prevalent, and of the second the higher parts of Southern California and New Mexico The suitability of any given district for the treatment of nervous disorders depends on altitude, barometric pressure character and temperature of prevailing winds, the nature of the subsoil, gravelly loam being most desirable an abundance of sunshine, and finally in a lesser but still important degree, on idiosyncrasy Places where heavy storms are prevalent should be avoided The Maine country about Rangeley Lakes is almost ideal for neurasthenic patients, with an altitude of 600 to 1000 feet and a rare combination of sea and pine laden atmosphere with plenty of sunshine Next he would place the inland country of New Brunswick and Nova Scotia away from the fogs of the coast The third in order is the great lake region of Ontario, Wisconsin and Michigan, spreading east to Muskoka Lakes and about Lake Simcoe and Nipissing Any very stimulating climate should be avoided, hot winds frequent fogs, cloudy saturated atmosphere with slight movements of air currents, low country with the monotonous moderate heat The ideal conditions include sea air in a well wooded country, just far enough from the coast to avoid its fogs A sea voyage is as a rule an excellent preliminary to other climatic measures provided it is not stormy, and good feeding is an important addition, without it other methods may fail

67—This article is noticed editorially in THE JOURNAL of May 11, p 1324

69 **Urinary Carbohydrates in Diabetes**—After noticing first the statement of Rosin and v Alfthan, that the unfermentable carbohydrates are increased in diabetes, Edsall made an examination of the esters formed in a case of diabetes insipidus with the result of finding that the carbohydrates were not increased Any increase in this disease, unless very marked, should scarcely be looked upon as an evidence of primary disturbance of the metabolism of carbohydrates, since flushing the system with large quantities of water would cause a large increase of nitrogen output He thinks, taking all things into consideration, that the amount of carbohydrates in the urine depends largely on the diet and they are in a large part at least derived from the food rather than formed in the body, though the question is still widely open

71—See abstract in THE JOURNAL of March 2, p 589

49 **Protargol**—In 16 cases in private practice, which are available for study, Reichmann found 14 with anterior urethritis and 2 presenting also posterior urethritis Only 4 were first cases, all the others had had previous attacks All applied for treatment during the first week, and in only 1 case of posterior urethritis was he compelled to stop the treatment on account of complications but even here protargol finally gave satisfactory results though the treatment had to be continued for a long time In the other 15 cases complete disappearance of the gonococci could be observed between the third and ninth day though prolonged injection of a 1 per cent. solution for ten minutes was continued for at least two weeks The entire course of the treatment did not exceed twenty three days, excepting where complications occurred

81—This article was abstracted in THE JOURNAL of March 2, p 589

88 **Placenta Previa**—After discussing the utility of Cesarean section in cases of placenta previa Boyd "would recommend an immediate examination under anesthesia of all suspected cases for the purpose of 1 Confirming the diagnosis 2 Determining the variety of the previa 3 The size and position of the fetus 4 The condition of the cervix, and finally to facilitate the introduction of the cervical and vaginal tampon If the hemorrhage appears before the viability of the child if the previa is marginal the cervix dilatable, the fetal heart absent then version or forceps may suffice If however, the child is viable the previa complete or partial, the cervix rigid or the fetus transverse, then in preference to other interference, the Cesarean section would seem indicated"

89 **Cornual Pregnancy**—In this concluding paper Kehrer sums up the treatment of accessory horn pregnancy in the following words "Expectancy is never indicated, and neglect to interfere before the seventh month is a blunder After the thirty second week we must seek to save the child by Cesarean section"

94 **Eustachian Electrolysis**—Kenefick offers the following conclusions "1 That it can not be foretold exactly in any given case just what result will follow this treatment as this will depend largely on two comparatively unknown quantities, viz (a) the vascularity of the tube lining and its toleration of the mechanical and electrical interference and (b) on the degree of tympanic involvement 2 That tubal obstruction is early present in the great majority of cases of so called chronic hypertrophic catarrhal otitis media, and that progressive deafness, tinnitus and vertigo and many of the peculiar and distressing head symptoms may be purely mechanical, dependent upon closure of the tube by an organized obstruction while the tympanum and its structures are yet free or only slightly involved Under the latter conditions brilliant results may follow restoration of the tube's patency 3 That in any case where Eustachian obstruction has become organized, the best means of disintegrating and causing its reabsorption is by the electrolytic bougie which in rapidity, efficiency, and permanency excels all known methods"

99 **Otitic Meningitis**—Hinsberg's article is a discussion of the diagnosis with a number of cases reported illustrating the various points discussed He holds that the meninges, like the peritoneum, may be able to dispose of certain degrees of bacterial invasion, and the question whether it is worth while to remove the primary focus under these circumstances may arise The circumscribed otitic meningitis may progress like cases of beginning diffuse meningitis or may simulate cerebral abscess Positive diagnosis is often impossible but that it is a fact that a circumscribed meningitis may give the symptoms of a diffuse process should warn us not to be too ready to give a fatal prognosis The exact status of lumbar puncture for diagnostic purposes is not yet decided, and it is not altogether free from danger It seems to the author that it is of no use in patients who are practically hopeless, and whether it will inform us as to the diffuse or circumscribed nature of the inflammation is a question Turbid fluid and increase in albuminuria does not necessarily mean diffuse meningitis, and the presence of bacilli is not of much positive prognostic value It is certain, he holds, that some cases of purulent meningitis recover spontaneously The occurrence of circumscribed areas of meningitis is always dangerous, since it may be the starting point of a diffuse process, and we can not say when this is liable to occur We should, therefore, be ready to assist Nature in every possible way, either by removing the primary focus in the otitic process, or if necessary by incising the dura This removal of the primary process has been successful in many reported cases, one of which is cited He reports a number of cases showing the difficulties of deciding whether the aural suppuration is the cause of the meningitis or not and he says that we may conclude from these that among a not very large number of otherwise well persons the paralytic symptoms give the first sign of tubercular meningitis and the combination of a discharge from the ear with tubercular meningitis is not very rare, especially among children

102—This article appeared in THE JOURNAL of March 2 p 537

110 This article appeared in THE JOURNAL, April 27, p 1157

111 **Genesis of Uric Acid**—Chittenden concludes that uric acid has a two fold origin in man, one portion, coming from the breaking down of nuclein containing tissues or cell elements of the body, hence endogenous, while the other, usually the larger, is of exogenous origin, from a transformation of free and combined purin compounds in the food The first is essentially constant in amount with the same individual under all conditions of diet, but is subject to slight variations in connection with alterations in activity of the tissues It is a physiologic constant for a given individual, but individuals vary and personal idiosyncrasy, constitutional differences, etc, affect it The amount of exogenous uric acid depends on two factors viz, the quantity and character of the nuclein contained in the ingested food, and the quantity and character of free purin bases present in the food The uric acid coming from nucleins does not appear until some hours after digestion has been under way, while that from free purin bases, such as from meats, soups coffee etc leads to a quicker output owing to their ready solubility and availability Differences in the extent of this form of uric acid production are traceable to natural or free purin bases, adenin, hypoxanthin and guanin for example, showing distinct differences in the extent to which they are individually converted in the body There is no actual relation whatever between daily urea and uric acid output, they stand for distinct chemico physical processes and any attempt to emphasize the so called uric acid to urea ratio is misleading Between uric acid and ordinary proteid metabolism there is no connection whatever With a purely non nitrogenous diet on the one hand, and a diet rich in eggs, milk and cheese on the other, with perhaps a maximum amount of contained proteid, the output of uric acid remains practically unchanged The genesis of uric acid is to be found solely in the metabolism of the tissue nucleins and in the transformation of nucleins and free purin bases of ingested foods

119 **Deaf Mutism**—Judging from the results of 150 autopsies collected by Saint Hilaire Carroll concludes that the pathology of deaf mutism varies greatly The anatomical alterations of the ear, which are capable of producing serious deafness, have not been found in deaf mutes, no permanent lesions are present and no single definite pathologic condition characteristic of disease

125 **Pharyngomycosis**—The literature of the pathology of pharyngomycosis is reviewed by Kyle, who notices the general opinions in regard to the disease, discusses the question of the patient's condition, the presence of leptothrix, the state of the epithelium and submucosa and illustrates his article with reproductions from lantern slides He does not believe that the disease is especially affected by sex or age, though it does seem to be somewhat affected by climatic conditions The general health seems to bear very little relation to it, and he concludes that the disease is not uncommon though he has only seen ten cases As regards the importance of the leptothrix he is inclined to believe its action is secondary and it is more than likely that the chemical changes brought about by the pathologic alteration in the submucosa causes a change in the glandular secretion and forms soil which is a suitable nidus for the proliferation of certain bacteria This degeneration seems to be largely hyaline, and while many bacteria were demonstrated on the surface the subepithelial cells showed no alteration significant of bacterial infection Their relation to the disease he thinks is controlled by chemical reactions of tissues and secretions The absence of clinical phenomena invariably indicates that if there is any bacterial cause the germ produces no toxine and this would be the case with the leptothrix The reaction of the glandular secretion of the mouth does not seem to have any effect on the disease, which is also against the bacterial theory, since as a rule, the pathogenic bacteria require an alkaline medium Local application of germicides and other agents having no effect may be explained by the closure of the lymph channels from the process of keratitis and subepithelial change, which prevents the cells

from penetrating the tissues Whatever the pathologic change may be the slides indicate their beginning from below and extending upward

126 **Sounding the Frontal Sinus** —Wells says "To successfully sound the frontal sinus we must have a probe bent at 3 cm from the end, which should be rounded and at an angle of about 100 degrees though capable of being flexed to a greater or less extent to suit individual differences Using the uncinate process as the guide (resection of the anterior end of the middle turbinate is necessary in some cases) to begin, we apply the beak of the probe well backward in the hiatus and draw it forward and upward in the direction of the sinus at the same time that the handle is depressed If it does not slip easily into the cavity, do not use force, but holding always the probe lightly in the hand, reintroduce feeling for the ostium with the beak a little in front of the hiatus If the sound be in place we will be aware of it by the following tests 1 The probe will have penetrated such a distance as to measure more than 6 cm (between 6 and 7 cm) from its extremity to the point where the handle is in contact with the anterior border of the floor of the nose 2 The direction will be such that it makes an angle of about 60 degrees with the floor, or what is the same thing the handle makes such an angle with an imaginary horizontal line or plane, continuing the floor of the nose forward 3 The beak of the probe will be directed forward (as shown by the ring indicators on the handle) 4 The handle will permit of a certain amount of rotation"

131 **Disinfection** —The conclusions deduced by Archinard, from his own observations, are 1 Sulphur dioxid is of little value and a destroyer of dyes, and should be discarded 2 Formaldehyde is an agent of great penetration and high efficiency though practically harmless to colors and fabrics Simple cheap, harmless and easily managed methods of its use are available and its immediate general adoption is much to be desired 3 Bichlorid of mercury is recommended as handy and an efficient means of treating washable fabrics 4 Sprinkling with a 20 per cent solution of formalin and keeping in closed containers for twenty four hours enables us to dispose of woolen and other wearing apparels not amenable to treatment by bichlorid 5 Chlorinated lime is our best agent for disinfection of excreta vaults, yards, drains, etc 6 Incineration is the best method of disposing of substances of no intrinsic value, such as soiled rags, etc

FOREIGN

The Lancet, May 4

Eczema in Relation to Age MALCOLM MORRIS —Morris divides eczema into 1 Eczema of infancy, 2, of childhood, 3, of puberty, 4, in the adult 5, of the menopause, and 6, in the aged Beginning with the first of these he suggests that a little circular patch on the scalp of a new born child should not be neglected, as is too often the case, for if it is left alone a red areola appears, and from this other circular patches will start and a generalized eczema follow In treating this we should first recognize that the child has a great blood supply to the brain, and, owing to the great vascularity of the scalp, the slightest irritation is very liable to convert a very trivial condition into an acute one and make eczema spread from that particular spot Therefore, the washing should be done with no violence whatever and if soap be used, it should be a super fatty one, not the ordinary yellow soap The head should not be covered, especially in the house and it should not be too warmly clad about the head when taken out Heat and friction increase the blood supply, the eczema may extend down the front of the chest and possibly behind the ears, form a collar around the neck, and patches form on the abdomen, back and limbs In infants it tends more especially to become pustular, and in a few days or hours dry crusts form and the typical condition of infantile eczema appears Tying the child's hands is needless, the child is hardly strong enough to scratch We should so act as to give the child relief without this The local treatment should be the simplest and gentlest, and applications be antiseptic There is nothing better than mild sulphur ointment 5 gr of precipitated sulphur to 1 ounce of benzoated lard When the discharge begins we have to consider what converts the dry form into the acute Usually it is attributed to improper feeding, but this is not always the case It is possible that there is some cause in the skin itself, as yet unknown Later in the child's life there may be unquestionable factors, one of these is vaccination, and if this is done when there are only circular patches or a seborrheic type, it may arouse a state of violent inflammation Another factor is intestinal worms, and he advises that we should pay attention to the bowels, and there is nothing so good as mercury in some form A small dose of calomel, given at bed time and repeated two or three nights, will do wonders For local treatment the best thing is to apply powder and dry up the discharge It is not a bad plan to apply it in a muslin bag The best powder is a mixture of finely triturated boric acid and starch, and perhaps one part of oxid of zinc This in a muslin bag, not too tight, loosely applied over the head tends to moderate the discharge To check formation of scabs one of the best prescriptions is oxid of zinc, 7 drams, lanolin 1 dram olive oil, 1 ounce, and 1 ounce of lime water Other drugs may be added a very small quantity of ichthyol being excellent The whole of the affected skin surface should be covered with a very thin gauze bandage, after having been covered with thin strips of linen soaked in this cream As soon as it begins to dry, the strips should be removed and some more applied When the condition passes into the dried up scaly stage he suggests a weak ammonio chlorid of mercury ointment This trouble is liable to be recurrent and nothing will ensure against this, but accuracy of treatment in early life is the key note of a great deal of later success In more chronic forms, when calomel is contraindicated, a small dose of gray powder is given as an alterative every night and seems to modify the process Morris does not believe in giving infants alkalies or any kind of specific treatment, and knows of none for this condition In children of 4, 5 or 6 years of age, the disease is generally also of seborrheic type and treatment is important Cases of this kind are best kept at home If the eczema of early life has left behind large glands, and there is any tubercular heredity, it is sometimes very wise to send the child to the seaside, but not if very acute, not tubercular He is not sure that teething has any effect in these attacks nor that teething bears any relation to eczema, though it seems to be the general belief that it has a strong influence Two forms of eczema may begin at puberty, the seborrheic form, which may commence upon the scalp or elsewhere apparently from local infection, and the type associated with dry skin—xeroderma—not necessarily the result of exposure to cold, and usually attacking the flexor surfaces, joints, elbows knees In this dry form soaking the skin in a prolonged bath and softening the dry and hard parts by glycerin and water 1 to 5 parts or if the eczema is very acute, the zinc cream already mentioned with the addition of some antiseptic will probably suffice There is another type at this period of life, a form of eczema which alternates with nerve attacks, especially asthma and beginning rheumatoid arthritis This form requires special internal treatment, nerve tonics, like valerianate of zinc, or if very bad perhaps small doses of opium Morris describes a case which came on in a healthy adult from exposure to cold, and emphasizes the importance of the mineral water treatment in certain forms of adult eczema It is not advisable during the acute stage nor the subacute, but it is proper when only a neurosis is left as the result of it In beginning cases the patient should be put to bed and covered with the lightest possible clothes the diet non stimulating, no alcohol, coffee or tea and the bowels regulated by calomel or saline injections in the morning Here also small doses of tartrated antimony may be of the greatest possible service, 1/32 grain is quite enough to produce a marked effect The action of alcohol in connection with eczema is especially noticed In intertrigo is a very disagreeable form of eczema which should be relieved by curtailing the exercise, using antiseptic lotions and careful drying, or even a weak sulphur ointment applied accurately over the parts It is purely local and requires only local treatment The varicose eczema which is very common in adults is treated by rest in bed, with leg elevated, especially at night and the application of Unna's zinc glycerin jelly, made

by mixing oxid of zinc gelatin glycerin and water It should be heated in a water bath and after liquifying is cooled a little and painted on the skin by a large brush The gelatin should be applied all over the vein, as well as all over the eczematous patch and a little cotton wool put over it to make it dry One application should last two or three days, and the patient feel quite comfortable Another form of chronic eczema of the leg is mentioned occurring in little circular patches He puts the drugs which are efficient for it in the following order salicylic acid resorcin pyrogallic acid and chrysarobin First take salicylic acid 1 gr to the ounce, if that fails combine resorcin with it 15 gr to the ounce if these two fail use pyrogallic acid 5 or 6 gr to the ounce If after making the pyrogallic acid stronger it still fails try chrysarobin ointment (B P) one half strength well rubbed in Eczema of the menopause is generally an acute eczema of the head and face, and he also mentions eczema of the vulva and anus For the first form he would use ichthyol given internally in the form of tablets 2 5 gr after each meal increased to 5 gr or more The effect is often extraordinary in clearing up the symptoms Fairly strong applications of sulphur and resorcin may be used locally Eczema in the aged is very serious on account of their weak nutrition The atonic condition of the skin leads to a chronic eczema with short exacerbations not disappearing as in early life It interferes with taking of nourishment, and by reflex irritation of the intestines prevents digestion This reacts against the acute condition thus creating a vicious circle There is only one drug for this condition as far as he knows that is opium He thinks that it is absolutely necessary and what harm is it likely to do if life is made intolerable without it?

Some Further Investigations on Rheumatic Fever F E Poynton and Alexander Paine—The authors have isolated their diplococcus from sixteen cases of rheumatic fever They have succeeded in obtaining it in 3 rheumatic nodules taken from 2 cases and in 1 instance they have isolated it in pure culture Intravenous inoculation of this culture has produced valvulitis pericarditis and polyarthritis in the rabbit They have isolated diplococci from the joint exudate of this rabbit The nodule is looked upon as largely a characteristic manifestation of rheumatic fever, therefore they conclude that their investigation lends strong support to the contention that this diplococcus is the cause of the disease They also discuss the pathology of rheumatic chorea, and attempt to explain its clinical characteristics that most cases probably commence as the result of the actual presence of these diplococci and their toxins in the brain When chorea is apparently started by fright or shock they believe the toxins are already in the brain and the shock only precipitates the disease They have also demonstrated the presence of these organisms in the polymorphonuclear leucocytes and suggest as a possibility that this leucocytosis in rheumatic fever is protective It does not appear from their researches that there is any definite incubation period in rheumatism and they also offer some facts which seem to indicate that the fever is a primary phenomenon of the disease They have seen the temperature rise within twenty-four hours of inoculation whereas local lesions usually do not appear until the third day There is no question as to the relations of the organism to cardiac lesions, for they have repeatedly seen them produced by it in rabbits

On Serous Vaccinia in Connection with Cretinism and Ricketts Robert Kirk—The relation of the serous character occasionally shown in vaccinia to constitutional conditions is illustrated by Kirk in four cases, which he reports, of subsequent myxedema or cretinism and in one case spasmodic asthma He suggests that there exists here a hereditary constitutional vice which manifests itself in the peculiar characteristics of the vaccinia and this latter may possibly have a tendency in such cases in developing subsequent myxedema He asks whether the thyroid is specially concerned in the production of serous vaccinia and the serous types of other affections and he answers that the evidence seems to show that it is It appears further that the condition of the gland in such cases is one in which it is prone to atrophy from existing causes that would otherwise prove inefficient and one of his cases has made this of much significance in this regard If the healthy gland is necessary to produce viscid or normal vaccinia, it is conceivable, he thinks that it may perform an office of this defensive kind whether it has a toxin destroying power or not The viscidity may be defensive limiting the multiplication of organisms, amount of toxins produced and absorbed, while if it is of a serious character opposite results may ensue He suggests the experimenting on calves, producing vaccinia after extirpation of the thyroid, to test the question

Bulletin de l'Academie de Med (Paris), April 18

Treatment of Chlorosis with Salts of Copper Lilgrois—It has been Lilgrois experience that iron cures about 50 per cent of all cases of chlorosis and arsenic 35 per cent The remaining 15 per cent of the cases are scrofulous, and this class resists arsenic and iron but can be cured by the aceto phosphate of copper He has been presenting the benefits of this copper treatment since 1887 and a number of Italian writers have called attention to the hematogenic power of the salts of copper Hare has also successfully administered arsenite of copper in anemia The formula found most effective in Lilgrois experience is 5 mg to 1 cg of neutral copper acetate and 5 cg of sodium phosphate made into a pill coated with licorice powder then with glycerin and then with sodium phosphate and silver coated Giudicandrea has recently reported eighteen cases of chlorosis treated with 5 mg to 5 cg of copper acetate a day The number of red corpuscles constantly increased and the amount of hemoglobin, while the general health rapidly improved No symptoms of intolerance were observed He alternated iron and copper and commenced at once with the latter when iron produced disturbances

Influence of Quinin on the Striated Muscles During Chloroformization J de Tarchanoff—Experiments on frogs demonstrated that the injection of a 2 per cent solution of quinin hydrochlorate in the muscles of the thigh or back, followed by the administration of chloroform, caused the muscles affected by the quinin to assume cadaveric rigidity under the influence of the chloroform The muscles lost their transparency elasticity and excitability, and became opaque and rigid this condition persisting for several days If the heart muscle is affected by the quinin the animals are unable to bear the chloroform and under its influence the heart stops in diastole much sooner and more rapidly than in the control tests The quinin evidently renders the muscles less resistant to the coagulating action of the chloroform but does not affect the action of ether The quininized muscles do not become rigid under the influence of the latter, and the heart does not become paralyzed Binz considers quinin a poison for living protoplasm in general and for the muscles in particular, enfeebling their vital functions and diminishing oxidation

Bulletin de la Societe Med des Hop de Paris, April 25

Influence of Lumbar Puncture on Gastric Crises G M Debove—The cures reported in cases of sciatica and the fulgurant pains of tabes, by spinal cocainization, suggested to Debove that the benefit may have been due to the lumbar puncture rather than to the cocain injected He accordingly practised lumbar puncture alone in a case of essential, intense gastric crises similar to those of tabes About 30 c c of cerebrospinal fluid were withdrawn and the painful crisis was arrested immediately

May 2

Hysteric Mammary Hemorrhage Le Gendre—This rare manifestation of hysteria was to have been treated by hydrotherapy when evidences of tenia were discovered and vermifuges administered instead With the expulsion of the tenia all the complicated hysteric and hysteriform symptoms vanished, with no recurrence during the year

Lobar Localizations of the Liver F Glénard—The liver is anatomically divided into four lobes but percussion shows only two Palpation particularly with the thumb of the left hand, with which it is possible to outline the crest of

the margin of the liver, supplemented by pivoting this edge forward by bimanual pressure, and its lower position during inspiration, enables three lobes to be distinguished Glénard advises graphic notation of the data determined by the thumb palpation, and calls the lobes the right, the square or cholecystic and the epigastric lobe These various lobes develop independently of each other, one may be hard while the others are soft One may be indolent and the others hyperesthetic The free margin may be round and smooth in one and sharp in the others They may become hypertrophied independently of each other and experiments on the cadaver show that each has a separate circulation to a certain extent and that each lobe has a direct connection with a certain portion of the intestines Hyperemia in a certain segment of the intestines is followed by localization of the congestion in the corresponding lobe of the liver Sérégé has recently studied this connection between segments of the intestine and the various lobes of the liver not only on the cadaver but by injecting a stain in the veins of living animals He found that an infinitesimal amount of a stain injected in the superior mesenteric vein was transported exclusively to the right lobe of the liver, while it was exclusively localized in the left lobe when injected in the venules in which the splenic vein originates He concludes that there must be two currents in the portal vein, which pass along together without blending, one from the superior mesenteric vein to the right lobe and the other from the splenic vein to the left lobe The density and freezing point of the serum in each current varies slightly He found in sixteen autopsies of patients who had succumbed to dysentery with abscess of the liver that in fourteen cases the abscess was in the right lobe and the ulcerations in the intestines were in the region of the superior mesenteric vein In the two cases in which the ulcerations were in the rectum, the abscess was in the left lobe of the liver He also states that in hundreds of other observations he has never found a single contradictory case In one case of carcinoma of the rectum there was a metastasis in the left lobe of the liver In another a neoplasm in the small intestine coincided with a neoplasm in the right lobe, in a third a neoplasm in the cecum corresponded to another in the right lobe, and another in the rectum had induced a tumor in the left lobe, all four in the same subject Still another case of a neoplasm in the cecum is reported, accompanied by an abscess in the right lobe Porak recently mentioned a case of abscess in the left lobe in a new born infant consecutive to infection of the umbilicus Sérégé has also observed two cases of chronic gastritis or gastroduodenitis with an abscess in the left lobe, showing the intimate anatomic relations between the stomach and liver He also reports two cases of gangrenous appendicitis, both accompanied by abscess in the right lobe of the liver Glénard thinks that the liver has a more preponderant rôle in general pathology than is recognized at present

Presse Medicale (Paris), April 6

Action of Tuberculosis on the Kidneys A BRAULT—Certain writers have recently asserted that tuberculosis of the kidneys—aside from the actual tubercular lesions—results in the production of a chronic parenchymatous nephritis Brault, on the other hand, states that in all his experience he has never noted anything of the kind but always an amyloid degeneration, more or less pronounced, as the result of the influence of this condition In patients with amyloid degeneration, the altered glomeruli allow the free passage of albumin The epithelium is but little affected, comparatively speaking, and allows the passage of the extractives and of methylene blue Symptoms of uremia consequently do not appear until a very advanced stage The amyloid degeneration may be complicated by syphilis or some other disease, resulting in the shriveling of the kidney This amyloid degeneration of the kidneys is the only remote, apparently non specific manifestation of tuberculosis which Brault has ever observed in man

April 20

The Ureter Bladder and Pyelovesical Reflex in Renal Pathology P BAZY—Pressure on the anterior abdominal wall, 2 or 3 cm from the median line, will determine pain in certain cases of cystitis If it irradiates to the bladder it is similar in character to the pain of nephritic colic and has the same meaning A still more significant phenomenon is a painful desire to urinate elicited by vaginal palpation of the lower surface of the bladder The sensitive point in this case corresponds to the orifice of the ureter and indicates a pyelitic lesion in the latter This orifice is higher in man and more difficult to locate but if it proves possible thus to induce the pain, it has the same diagnostic value in both sexes, and demonstrates the futility of treating the cystitis exclusively when there is a concomitant lesion above Bouchard's sign is also a valuable aid in determining whether pus in the urine comes from the bladder or kidney A little Fehling's solution is added to the urine in a glass and the glass is suddenly jarred If the pus comes from the kidney, droplets of gas will be discovered in the fluid If heated, vesical pus sinks to the bottom, while kidney pus rises on account of the air imprisoned in it Pollakiuria at night and the frequency of urination with little or no accompanying pain are other important symptoms

April 24

Diagnosis by the Leucocytes G MILIAN—A few cubic centimeters are enough for cytodiagnosis, and they are easily derived from an exploratory puncture All the fluid obtained should be sent to the laboratory to be examined, and not merely the supernatant portion The presence of polynuclear elements in the cerebrospinal fluid indicates acute cerebrospinal meningitis, while lymphocytes suggest a tubercular meningitis or some other organic lesion of the nervous system The absence of figured elements in the cerebrospinal fluid in the tertiary stage of syphilis shows that the nervous symptoms observed are due to neurasthenia alone, with no immediate danger of tabes In acute gonorrheal hydrocele, the effusion contains polynuclear cells, while only lymphocytes are found in tubercular hydrocele Chronic idiopathic hydrocele contains few cellular elements, except possibly large endothelial cells Polynuclear cells are characteristic of acute serofibrinous, streptococcus pleurisy The effusion in pneumococcus pleurisy contains red corpuscles and a few lymphocytes, with mononuclear cells more or less numerous, some enclosing polynuclear cells Lymphocytes predominate in tubercular pleurisy, but the mechanical pleurisy in cardiac or Bright's disease, contains few leucocytes, but large cells, like endothelial, are scattered over the surface of the pleura as if desquamated In hemothorax an increase or decrease in the number of red corpuscles indicates that the effusion is increasing or being absorbed The polynuclear cells should all be gone by the twenty fifth day If they persist suppuration may be feared

Revue Hebd de Laryngologie, Etc (Bordeaux), April 13 and 20

Hysteric Mastoiditis G LIARAS—A number of patients have applied at Moure's clinic, during the past few years, begging for relief from intensely painful mastoiditis Examination failed to disclose the slightest organic lesion in several cases, and the trouble was evidently an algia of the mastoid on a hysteric foundation The pain always appeared suddenly in these cases, was intense from the first, and was distributed over the entire mastoid region, with no especially sensitive points It was not constant in location and in one case was diagnosed by the sudden transference of the pain to the opposite mastoid region The absence of fever and prostration are also signs of the hysteric nature of the affection It yields to suggestion, with possibly a sham operation Neuropathic symptoms usually point the way to its differentiation The algia sometimes coincided with an otitis, but the pain was always out of proportion to the lesions observed, and appeared when the patients were on the road to recovery and drainage well established The pain was continuous, not irradiating, with no special localizations but excessive hyperesthesia, without fever chill or prostration In another group of patients the pseudo mastoiditis appeared years after an otitis had developed and healed The tissues were intensely sensitive to pressure, but there was no tumefaction nor congestion The pain was continuous, without exacerbation The possibility of the coincidence of an algia of the mastoid with an acute affection of the middle ear should be borne in mind and hysteric antecedents carefully weighed Intense pain in the mastoid region, of an

indeterminate and indefinite character, in persons subject to hysteria, with or without an affection of the ear should suggest the possibility of a monosymptomatic and disguised manifestation of hysteria Five personal cases are reported in detail and several in the literature are reviewed

Semaine Medicale (Paris), April 24

Treatment of Arteriosclerosis by Inorganic Serum C TRUNECEK —There is a certain proportion of calcium phosphate in the blood serum This phosphate is insoluble in water but dissolves readily in a saline solution The fact that it is in solution in the blood serum is probably due to the large amount of sodium chlorid in the fluid All the tissues of the organism contain sodium chlorid and the proportion is larger in youth As the body grows old there is less and less of this sodium chlorid 4 92 gm , sodium phosphate, 15 cg , sodium carbonate cium phosphates which result in arteriosclerosis It is also indicated by the unusual acidity of the urine, which suggests an insufficiency of the alkaline salts in the blood Reasoning from these premises Trunecek administers the alkaline salts, normally to be found in the blood plasm as a therapeutic measure in arteriosclerosis As they would be trying for the alimentary canal, he injects them subcutaneously in the form of an inorganic serum and has found the following formula best adapted for the purpose sodium sulphate, 44 cg , sodium chlorid, 4 92 gm , sodium phosphate, 15 cg , sodium carbonate, 21 cg , potassium sulphate 40 cg , in water to make 100 gm The salts are eliminated too rapidly through the kidney when injected into a vein, consequently he injects the serum under the skin of the forearm He commences with 1 c c and repeats the injection every fourth to seventh day, increasing by 2 to 5 cg at a time If the dyspnea from the arteriosclerosis is very distressing he repeats the injection every day The largest amount he has ever injected at a time was 7 5 c c , usually 5 c c is sufficient The dyspnea is sometimes relieved by a single injection more promptly than by morphin, and cardiac asthma is relieved in the same way Sleep and appetite return and the general health improves The sclerosis of the arteries apparently retrogressed in certain cases but this is difficult to estimate and consequently he bases the results accomplished by the treatment on the improvement in the general health This inorganic serum is indicated in all cases of arteriosclerosis in which the hyperacidity of the urine and the desquamation of the skin testify to a deficiency of alkaline salts in the blood The relief of the dyspnea is probably due to the favoring of the oxidations by the alkaline medium, and by the increased absorption of carbon dioxid by the alkalinized blood The sodium chlorid has also a directly stimulating action on the heart, and all these salts have a favorable influence on the formation of normal epithelial tissue, and possibly also on the regeneration of the vascular endothelium, altered by the arteriosclerotic process They dissolve the calcium phosphate which has become incrusted on the walls of the vessels, promote organic combustions and metabolism and regulate the functions of the various organs, especially those of the heart and vessels Several cases are described in detail

May 1

Surgical Deviation of the Blood of the Portal Vein B SCHIASSI —There are only twenty observations on record of the intentional establishment of a collateral circulation to relieve the obstructed portal vein Schiassi reports two more and urgently recommends his technique as free from the disadvantages of the operation as first proposed He makes a vertical incision 15 to 20 cm long extending downward from the costal arch A second incision about the same length is made at right angles to the first, starting at the juncture of the upper and middle third of the first, and extending beyond the median line After exposing and examining the liver, etc , the great omentum is drawn out through the transverse incision as fas as possible and the peritoneum is sutured The large flap of omentum is then spread evenly over the peritoneum under the abdominal muscles, and gently rubbed with a compress dipped in a bichlorid solution, in order to promote the formation of adhesions The edges of the flap are fastened with a few catgut stitches and the muscle skin flaps are replaced and sutured in two tiers no drainage One patient with pericardial adhesions and hepatic cirrhosis and ascites has had no recurrence of the effusion during the two years since the portal circulation was thus deviated Another patient was a young man who had suffered from an infectious nodular cirrhosis for ten years with constantly recurring ascites He has gained twelve kilograms in weight and has now but a few cubic centimeters of fluid in the peritoneum During the third or fourth week after the operation intense dyspnea and profuse sweats with slight fever appeared after eating some raw eggs These symptoms disappeared when the diet was restricted to carbohydrates This case is another demonstration of the possibility of survival even when the functions of the liver are reduced to a minimum After surgical deviation of the blood of the portal vein the individual recovered comparative health A partial operation on a woman with malarial cirrhosis restored her to a satisfactory condition Schiassi observes that his operation is no more serious than an exploratory puncture, while it allows the entire abdominal cavity to be explored The effects can only be palliative at best but they enable life to be prolonged many years In case of passive congestion of the liver it is best to operate at the first indications of hepatic dyssystolia In ordinary venous cirrhosis prompt intervention is preferable before the connective tissue neoformation has done much harm It is also preferable in biliary cirrhosis to operate early and not wait for the effusion, draining the gall bladder for a time This procedure has been successfully done several times according to the literature

Ocular Complications of Smallpox —The physicians of Lyons, France, observed serious ocular complications in an epidemic of 800 cases of smallpox last year, two patients becoming blind They finally found that instillation of a 2 per 1000 solution of methylene blue, several times a day, at the slightest suspicion of disturbance in the eye, was as effective a prophylactic measure as nitrate of silver in ophthalmia neonatorum In serious cases they made subconjunctival injections Dufour recently cured a severe case by subconjunctival injection of a solution of bichlorid of mercury

Deutsche Med Wochenschrift (Berlin and Leipsic), April 25

Technique of Subcutaneous Injection of Quinin BLUEMCHEN —Fifty centigrams of quinin hydrochlorate dissolved in 1 cubic centimeter of hot water can be injected under movable skin without pain Infiltration very rarely occurs and is never painful, the skin remains unaltered, with no necrosis This simple aqueous solution is aseptic, as tests at the Berlin Institute of Infectious Diseases have shown that even tetanus spores are destroyed by five minutes boiling in the water or the quinin solution The injections are painless and easily made, while the effect is much more reliable than when the quinin is administered by the mouth

Further Communications in Respect to the Biologic Serum Test for Blood UHLENHUTH Further tests of the serum of rabbits previously treated with defibrinated blood have demonstrated that the test is accurate and sensitive with blood that has been putrid for three months, also with menstrual urine blood mixed with soapy water etc Specimens of blood frozen at 10 degrees below zero, C for fourteen days, also responded equally well to the tests The serum can be heated to 60 C for an hour and one serum is still in use that has been kept for three months by the addition of 5 per cent carbolic acid The rabbit is treated with 10 to 20 c c of blood This small amount can be taken from a healthy person without injury by applying a Huerteloup cup, and injected at once into the rabbit after it has been defibrinated

Defective Oxidation of Sugar in the Organism P MAYER —Continuing his researches on the "glukuron acid" in the urine, Mayer found it frequent in incipient diabetes and he considers it a valuable diagnostic sign of a preliminary stage of diabetes before any sugar can be discovered in the urine The presence of the "glukuron acid" indicates defective oxidation of sugar in the organism, and this may progress to actual diabetes in time unless arrested by appropriate prophylactic dietetic measures

May 2

The Bacilli Discovered by Danysz, Pathogenic for Rats J KISTER—The assertions of Danysz in regard to the pathogenic power of his bacillus have been confirmed by the tests at the Hamburg Institute, reported in this communication All the rats fed with cultures of this bacillus died in five to seven days ,and white mice still earlier There is no danger of confounding this bacillus with that of the plague

Changes in the Malaria Parasite Under the Influence of Methylene Blue A IVANOFF —Methylene blue affects the protoplasm chiefly, and quinin the chromatin The forms of the parasite on which quinin has no effect are sensitive to the methylene blue and vice versa The young forms contain very little protoplasm and consequently are not affected by the methylene blue while they succumb rapidly to quinin The adult parasites are almost all protoplasm and consequently are very sensitive to the action of methylene blue The crescentic forms are completely resistant to quinin while they are entirely dstroyed by the action of methylene blue

Muenchener Medicinische Wochenschrift, April 23

Extraction of the Detached Fetal Head —Knapp describes sixteen cases in which the extraction of the detached fetal head presented more or less difficulty In one case an hour was passed in vain efforts to seize the head Cramer also describes two cases and recommends his method of seizing the orbit with the finger, as the simplest and the only successful means in his experience After one finger is in one orbit the other orbit can be seized in the same way and the brain matter pushed out, thus reducing the size of the skull In case of maceration the danger of detaching the head is imminent and every effort should be made to avoid it

Tuberculides E KLEBS—The cutaneous manifestations called tuberculides are probably, Klebs thinks, due to the toxins of the tubercle bacilli and are not necessarily accompanied by the latter, although they may become associated in some cases sooner or later, possibly by external contagion In a case of tuberculous iritis he describes, it appeared after an indurated erythema of the face, which was evidently due to ingested tubercular toxins

Wiener Klinische Wochenschrift, April 18

Gastro Intestinal Manifestations of Renal Calculi M STERNBERG—Gastric and intestinal disturbances are among the regular symptoms of renal calculi They consist mainly in the painful retention of wind and stools, disappear with the cessation of the renal colic, and are best controlled by opium during the attack The arterial pressure is high when the intestinal symptoms are pronounced The gastro intestinal symptoms may predominate to such an extent that they alter the clinical picture and simulate an affection of the alimentary canal In differentiating such cases, it is well to note that there may be a sensitive point in the ureter, at MacBurney's point, and also that in many cases the urine may not reveal any pathologic alterations for a long time An important aid in the differentiation is that renal colic pains subside when the patient assumes an exaggerated Trendelenburg position The intestinal disturbances are probably due to a reflex excitation of the inhibiting nerves of the intestine The atypical localization of the pains in certain cases, at MacBurney's point is probably due to a sensitive point in the ureter and at the tip of the tenth rib, to a reflected cutaneous sensitive point

Senile Atrophy of the Brain as Basis for Focal Phenomena A PICK—A case of senile dementia is described as a further contribution to the writer's previous announcements in regard to the appearance of focal symptoms on an exclusive foundation of senile atrophy of the brain The possibility, he adds, of the combination of a circumscribed patch of senile atrophy with a focal affection from some other cause, suggests an explanation for the hitherto puzzling cases in which, for example, a subcortical hemorrhagic focus coincided with unmistakable cortical symptoms The clinical symptoms of paralysis have been considered a mosaic of focal phenomena, but no one deemed it possible to apply this assumption to senile dementia Pick's experiences show that it is clinically possible to do this and that the reason why this is not more apparent is because encroaching senile atrophy usually invades a number of points at once The mechanism is the same as in epilepsy the limits between cortical and genuine epileptic seizures have disappeared, since it has been shown that the latter is a simultaneous, multiple appearance of symptoms of irritation

Gazetta degli Ospedali (Milan), April 21

Contraction of the Pupils During Menstruation G ASTORONI—The pupils commence to contract during the premenstrual period and the miosis attains its maximum during the first days after the flow is established This maximum varies in different individuals The density of the urine is usually increased proportionately These phenomena confirm the assumption of disturbances in the general metabolism and seem to indicate the action of some special toxic substance It is difficult to explain them as reflex phenomena emanating from the genital organs

Phenol in Treatment of Acute Articular Rheumatism A BALDUZZI—The writer of this communication reports that he has treated several cases of acute articular rheumatism by injecting 1 c c of a 3 per cent solution of phenol into the most tumefied joint or joints The results were extremely encouraging and confirm the assumption of the etiologic connection between this disease and erysipelas, by the cures obtained in each from subcutaneous injections of phenol

Compresses of Ether in Treatment of Incarcerated Hernia G B BURZAGLI—Compresses moistened with ether were applied to an incarcerated hernia the size of an egg fourteen hours after the first symptoms had appeared In thirty minutes the hernia became spontaneously reduced, with the application of less than 80 gm of ether Ether compresses have already a long list of successes to their credit

Books Received

Acknowledgement of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them A selection from these volumes will be made for review as dictated by their merits or in the interest of our readers

THE ACUTE CONTAGIOUS DISEASES OF CHILDHOOD By Marcus P Hatfield A M, M D Professor Emeritus of Diseases of Children Northwestern University Medical School Cloth Pp 142 Price, $1 00 net Chicago G P Engelhard & Co ,1901

CHIRURGIE DU FOIE ET DES VOIES BILIAIRES, par F Terrier, professeur à la Faculté de Médecine de Paris, et M Auvray, Médecin des hôpitaux de Paris Une vol gr in 8° avec 50 fig dans le texte, 10 fr Paris Félix Alcan, éditeur 1901

PRINCIPLES OF SURGERY By N Senn, M D, Ph D LL D Professor of Surgery in Rush Medical College in Affiliation with the University of Chicago Third edition Thoroughly revised with 230 wood engravings half tones and colored illustrations Royal Octavo Pp, xiv—700 Extra cloth $4 50 net Philadelphia F A Davis Company

ECZEMA, With an Analysis of Eight Thousand Cases of the Disease By L Duncan Bulkley, A M M D Physician to the New York Skin and Cancer Hospital Third Edition of Eczema and its Management entirely Rewritten Cloth Pp 368 Price $1 25 New York and London G P Putnam s Sons 1901

POINTS OF PRACTICAL INTEREST IN GYNECOLOGY By H Mc Naughton Jones M D M Ch, Q U I, Master of Obstetrics (Honoris causa) Royal University of Ireland Reprinted from the *Edinburgh Medical Journal*, 1900 With 12 Plates Cloth Pp 124 Price $5 00 New York William Wood & Co 1901

A SYLLABUS OF NEW REMEDIES AND THERAPEUTIC MEASURES With Chemistry Physical Appearance and Therapeutic Application By J W Wainwright, M D Member of the AMERICAN MEDICAL ASSOCIATION Cloth Pp 224 Price, $1 00 Chicago E P Engelhard & Co 1901

A TEXT BOOK OF THE PRACTICE OF MEDICINE By Dr Herman Eichhorst professor of Special Pathology and Therapeutics and Director of the Medical Clinic in the University of Zurich Translated and edited by Augustus A Eshner M D, Professor of Clinical Medicine in the Philadelphia Polyclinic Two octavo volumes of over 600 pages each over 150 illustrations Price per set Cloth $6 00 net Philadelphia and London W B Saunders & Co 1901

ATLAS AND EPITOME OF OPHTHALMOSCOPY AND OPHTHALMOSCOPIC DIAGNOSIS By Prof Dr O Haab Director of the Eye Clinic in Zurich From the Third Revised and Enlarged German Edition Edited by Geo E de Schweinitz Professor of Ophthalmology Jefferson Medical College Philadelphia With 152 colored lithographic illustrations and 85 pages of text Cloth Price $3 00 net Philadelphia and London W B Saunders & Co 1901

ATLAS AND EPITOME OF THE NERVOUS SYSTEM AND ITS DISEASES By Professor Dr Chr Jakob, of Erlangen From the Second Revised German Edition Edited by Edward D Fisher M D Professor of Diseases of the Nervous System University and Bellevue

Medical College New York With 83 plates and copious text Cloth $3 50 net Philadelphia and London W B Saunders & Co 1901

ESSENTIALS OF THE DISEASES OF CHILDREN By William M Powell M D Third Edition Thoroughly Revised by Alfred Hand Jr M D Dispensary Physician and Pathologist to the Children s Hospital Philadelphia 12mo 259 pages Cloth Price $1 00 net Philadelphia and London W B Saunders & Company

ATLAS AND EPITOME OF OBSTETRIC DIAGNOSIS AND TREATMENT Dr O Shaeffer of Heidelberg From the Second Revised German Edition Edited by J Clifton Edgar M D Professor of Obstetrics and Clinical Midwifery Cornell University Medical School With 122 colored figures on 56 plates 8 other illustrations and 117 pages of text Cloth Price $3 00 net Philadelphia and London W B Saunders & Company 1901

ATLAS AND EPITOME OF LABOR AND OPERATIVE OBSTETRICS By Dr O Shaeffer of Heidelberg From the Fifth Revised German Edition Edited by J Clifton Edgar M D Professor of Obstetrics and Clinical Midwifery Cornell University Medical School With 14 lithographic plates in colors and 139 other illustrations Cloth Price, $2 00 net Philadelphia and London W B Saunders & Co 1901

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS A Practical Exposition of the Methods Other than Drug giving Useful in the Treatment of the Sick Edited by Solomon Solis Cohen A M M D Professor of Medicine and Therapeutics in the Philadelphia Polyclinic Volume I Electrotherapy By George W Jacoby M D Consulting Neurologist to the German Hospital New York City In two Books Book 1 Electrophysics—Apparatus Required for the Therapeutic and Diagnostic Use of Electricity With 163 Illustrations Cloth Pp 242 Price per set $22 00 Philadelphia P Blakiston s Son & Co 1901

SELECT METHODS IN FOOD ANALYSIS By Henry Leffmann A M M D Professor of Chemistry and Toxicology in the Woman s Medical College of Pennsylvania and William Beam A M M D Formerly Chief Chemist Baltimore & Ohio Railroad With 53 illustrations in the Text 4 full page plates and Many Tables Cloth Pp 383 Price $2 50 Philadelphia P Blakiston s Son & Co 1901

TWENTY FIRST ANNUAL REPORT OF THE STATE BOARD OF HEALTH of the State of Rhode Island For the Year Ending December 31 1898 Cloth Pp 168 Providence R I E L Freeman & Sons 1901

UTERINE FIBROMYOMATA Their Pathology Diagnosis and Treatment By F Stanmore Bishop F R C S Eng President Manchester Clinical Society With 49 Illustrations Cloth 8p 123 Price $3 50 Philadelphia P Blakiston s Son & Co 1901

APHORISMS DEFINITIONS REFLECTIONS AND PARADOXES Medical Surgical and Dietetic By A Rabagliati M A M D F R C S Ed Late President of the Leeds and West Riding Medico Chirurgical Society Cloth Pp 291 Price $2 50 New York Wm Wood & Co 1901

TWENTY SEVENTH ANNUAL REPORT of the Touro Infirmary and Hebrew Benevolent Association of New Orleans La 1901 Paper Pp 99 New Orleans La Jos Levy & Bros

PROCEEDINGS OF THE PHILADELPHIA COUNTY MEDICAL SOCIETY March Paper 8p 63 Philadelphia Published by the Society 1901

FIFTY SECOND ANNUAL REPORT of the Board of Trustees and Superintendent of the Central Indiana Hospital for Insane for the Year Ending Oct 31 1900 Paper Pp 65 Indianapolis Wm B Burford 1901

Queries and Minor Notes

ELECTRIC AUTOMOBILES

CHICAGO May 16 1901

To the Editor —I notice a communication in THE JOURNAL of April 27 which is of general interest to the physician in active practice It relates to the automobile Your eastern correspondent discusses only two of the motive powers used to propel a vehicle steam and gasolin It is fair to assume from this fact that he is not conversant with the recent development and improvements of the electric motor and especially the electric battery The patents recently issued to Mr W A Crowdus the distinguished electrical expert of this city approximate the perfection of the electric automobile

No one can gainsay that electricity is the ideal motive power Being especially interested in this subject I have given some time and attention to it and have felt that the solution of the problem when it did come would be found in the battery The battery of the machine which I have purchased weighs 350 pounds gross which is one-third less than any other battery and will cover on average roads fifty miles without recharging I also know that another battery is constructed under the same patents weighing less than 500 pounds which will carry the machine almost 100 miles on a single charge

The trouble has been heretofore that the batteries have been too heavy and that they lacked endurance Under the new patents of Mr Crowdus the rapid disintegration that appears in the cells is done away with Another feature is that the energy which is used in stopping the vehicle and in going down hills is employed in recharging the batteries

These features make an electric road vehicle far superior to any other kind of a machine employing a different motive power

There is no class more interested in the automobile question than physicians and this letter is written in the conviction that the profession at large is anxious to know all they can about automobiles Your Eastern correspondent should acquaint himself with the recent improvements in other motive powers and particularly that of the power of electricity before he commits himself to a gasolin system and commends it generally, or even at all to his professional brethren Yours respectfully

CHAS L PADDOCK, M D

TEXAS NEW LAW

INTERIOR, VA May 6 1901

To the Editor —Please give me the name and address of the secretary of the State Board of Medical Examiners of Texas also the present law regulating the practice of medicine in that state Has a new law lately been enacted and from what date will it be in force C S K

ANS —The State Board of Medical Examiners has not yet been appointed though a number of names have been recommended by the state medical society to the governor The new law will go into force July 9 At present the medical boards are separate in each judicial district and there is no general State Board of Medical Examiners

NORMAL SALINE SOLUTION

BENTON HARBOR, MICH, May 7 1901

To the Editor —Kindly answer this question in THE JOURNAL and please many members Given at bedside or accident sterilized water and common salt a measure of one quart capacity and a teaspoon how may one make a normal saline solution, no scales for weighing for intravenous or subcutaneous injection This is a matter of vast importance frequently W I S

ANS —Normal saline solution is about 1 dram to the pint of sterilized water Therefore a small teaspoonful would approximately meet the requirements

PRACTICE IN MISSOURI

PARAGOULD, ARK, May 7 1901

To the Editor —Kindly give name and address of the proper person to inquire of as to the medical registration in Missouri under the present law When does the new registration law take effect in that state S M N

ANS —The new law has gone into effect and examinations are required of all desiring to practice in the state The secretary of the State Board of Health is Dr I C McPhee 1113 N Grand Ave St Louis Mo

WEIGERT S STAIN

COVINGTON, KY May 6 1901

To the Editor —Will you publish the working formula of Weigert s stain for elastic fibers in sputa? I refer to the article on p 1216 vol xxxvi No 17 W F S

ANS —The formula is given in Lee s Microtomist s Vade Mecum fifth edition 1900 as follows Take basal fuchsin 1 per cent resorcin (or carbolic acid) 2 per cent dissolve in water 200 c c of the solution are raised to the boiling point in a capsule and 25 c c of liquor ferri sesquichlorati, P G are added and the whole is boiled with stirring for two to five minutes more A precipitate is formed After cooling the liquid is filtered and the precipitate remaining on the filter is brought back into the capsule and there boiled with 200 c c of 94 per cent alcohol Allow to cool filter make up the filtrate to 200 c c with alcohol and add 4 c c of hydrochloric acid Stain sections (material fixed in any way) for twenty minutes to one hour Wash with alcohol clear with xylol (not with an essence) Elastic fibers dark blue on light ground nuclei generally unstained they may be after stained with carmin etc

HOME FOR INEBRIATES

FORT WAYNE IND May 9 1901

To the Editor —Would you kindly give me information as to or recommend some home where an inebriate could be kept for a few years at a reasonable expense? Are there any state institutions for the purpose and if so do any of them receive pay patients?

J W K

ANS —We refer the inquirer to our advertising pages We are unable to give any information as to the state institutions

HOFF TREATMENT FOR TUBERCULOSIS

SAN JOSE CAL May 6 1901

To the Editor —Will you kindly give me some light on the so called Hoff Treatment for tuberculosis as brought out by the *New York Journal*

L J B

ANS —See editorial in JOURNAL AM MED ASSN Dec 22 1900 vol xxxv p 1635

The Public Service.

Army Changes

Movements of Army Medical Officers under orders from the Adjutant General's Office, Washington, D C May 2 to 8, 1901, inclusive

Roger P Ames, captain and asst surgeon, Vols, recently appointed, from the Department of Cuba, via San Francisco, Cal, to duty in the Division of the Philippines

John M Banister, major and surgeon, U S A, member of a board at West Point, N Y, to examine candidates for admission to the U S Military Academy

William H Block, captain and asst surgeon, Vols, recently appointed, from the Department of Cuba to San Francisco, Cal, en route for duty in the Division of the Philippines

Charles C Byrne, colonel and asst surgeon general, U S A, retired from active service by operation of law (having reached the age of 64 years)

Herbert W Cardwell, major and surgeon, Vols, honorably discharged from the service of the United States, to take effect June 30, 1901

William D Crosby, major and surgeon, U S A, member of a board in New York City, to examine officers of the Corps of Engineers for promotion

William B Davis, major and surgeon, U S A, member of a board at West Point, N Y, to examine candidates for admission to the U S Military Academy

James C Dougherty, contract surgeon, from duty on the transport *McPherson* to report to the superintendent of the Army Transport Service for assignment

P Conover Field, contract surgeon, from Washington, D C, to New Brunswick, N J, for annulment of contract

John F Jones, contract surgeon, from Leroy, Ill, to duty at Fort Washakie, Wyo

Percy L Jones, captain and asst surgeon, Vols, recently appointed and now at San Francisco, Cal, to proceed to Manila, P I, for duty in the Division of the Philippines

Charles F Mason, captain and asst surgeon, U S A, member of a board at West Point, N Y, to examine candidates for admission to the U S Military Academy

Fred W Palmer, captain and asst surgeon, Vols, recently appointed and now at Brooklyn, Mich, to proceed, via San Francisco, Cal, to Manila, P I, for duty in the Division of the Philippines

Elmer A Scherrer, contract surgeon, former orders directing him to proceed from Fort Grant, Ariz, to Fort Washakie, Wyo, revoked

A B Smith, contract surgeon, leave of absence extended

Eugene L Swift, major and surgeon, Vols (captain and asst surgeon, U S A), now at San Francisco, Cal, to report in person to the surgeon general of the Army for instructions

Frank H Titus, major and surgeon, Vols, honorably discharged from the service of the United States, to take effect June 30 1901

Wilfrid Turnbull, major and surgeon Vols, honorably discharged from the service of the United States, to take effect June 30, 1901

Ralph W Waddell, dental surgeon, from Washington, D C, to San Francisco, Cal, en route for duty in the Division of the Philippines

William B Winn, major and surgeon, Vols, honorably discharged from the service of the United States to take effect June 30, 1901

In addition to the above orders boards were convened at certain places for the competitive examination of enlisted men and for examination of such other persons as may be properly ordered before them to determine their fitness for appointment as second lieutenants in the Army, and on these boards medical officers were detailed as follows At Chicago, Major Timothy E Wilcox surgeon, U S A and Major Henry I Raymond surgeon, U S A at Denver, Colo Major Edward B Moseley and Major Louis Brechemin, surgeons, U S A, at San Antonio, Tex, Peter J A Cleary colonel and asst surgeon general, U S A, and Charles B Byrne lieut col and deputy surgeon general, U S A and at Governor's Island N Y, William H Corbusier, major and surgeon U S A and Allie W Williams, lieutenant and asst surgeon, U S A

Navy Changes

Changes in the Medical Corps of the Navy for the week ending May 11 1901

Asst Surgeon J S Taylor, detached from the *Manila*, and ordered to the Naval Hospital, Yokohama, Japan

Asst Surgeon F L Benton, detached from the Naval Hospital, Yokohama, and ordered to duty on the Asiatic Station

Medical Director E Z Derr detached from the Naval Academy and ordered home to wait orders

Surgeon F W F Wieber, detached from the Naval Station San Juan, and ordered to the Naval Academy

Surgeon C H T Lowndes detached from the *Lancaster*, May 11, and ordered to the Naval Station San Juan, P R

P A Surgeon E S Bogert, ordered to the *Lancaster*, May 11

Surgeon L W Curtis, detached from the *Vermont*, May 11, and ordered home and to be in readiness for sea duty

Surgeon G Pickrell, ordered to the *Vermont*, May 11

Surgeon C F Stokes detached from the Asiatic Station, and ordered home, via mail steamer

Health Reports

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General, U S Marine Hospital Service, during the week ended May 11, 1901

SMALLPOX—UNITED STATES AND INSULAR

Alaska Sitka, April 9, prevalent among Indians

California Los Angeles, April 20-27 5 cases Oakland, April 6 27 2 cases San Francisco, April 20 27, 2 cases

Florida Jacksonville April 20 27 21 cases 1 death

Illinois Chicago, April 27 May 5 5 cases Freeport, April 27 May 4, 2 cases

Indiana Evansville, April 27 May 4, 2 cases, Michigan City, April 22 May 6, 5 cases

Iowa Clinton, April 27 May 4, 1 case, Ottumwa, March 30 April 27, 5 cases

Kansas Wichita, April 20 May 4, 71 cases

Louisiana Bossier, April 1 31, 1 case Caddo, April 1 31, 7 cases, New Orleans, April 30 May 4, 23 cases, Sabine, April 1 31, 1 case

Maryland Cambridge, April 1 30, 5 cases

Massachusetts Fitchburg, April 20 27, 2 cases, Holyoke, April 27 May 4, 1 case

Michigan Bay City, April 20 27, 7 cases, Detroit, April 27 May 4, 1 case

Minnesota Minneapolis, April 20 May 5, 4 cases, Winona, April 20 27, 3 cases

Nebraska Omaha April 20 May 4, 32 cases

New Hampshire Manchester, April 27-May 4, 4 cases

New Jersey Jersey City, April 21 May 5, 23 cases, Newark, April 20 May 4, 11 cases

New York New York, April 27 May 4 86 cases, 10 deaths

North Carolina Charlotte April 1 30, 18 cases 1 death

Ohio Cincinnati April 26 May 3, 1 case, Cleveland, April 27 May 4, 61 cases, 2 deaths

Pennsylvania Lebanon, April 27 May 4, 3 cases, McKeesport, April 20 27, 1 case Philadelphia, April 27 May 4, 2 cases, 1 death Pittsburg April 20 May 4 5 cases, Steelton, April 27 May 4, 1 case, Williamsport, April 27 May 4, 1 case

Tennessee Memphis April 20, May 4, 40 cases, 2 deaths, Nashville, April 27 May 4, 6 cases

Utah Salt Lake City, April 20 27 18 cases

Virginia Roanoke, April 1,30, 42 cases, 1 death

West Virginia Wheeling, April 20 May 4, 8 cases 1 death

Wisconsin Green Bay, April 28 May 5, 1 case, Milwaukee, April 20 May 4, 2 cases

Porto Rico Ponce, April 13 20, 9 cases

SMALLPOX—FOREIGN

Argentina Buenos Ayres, Feb 1 28, 32 deaths

Austria Prague, April 6 20 11 cases

Belgium Antwerp, April 6 20, 5 cases

Brazil Pernambuco, March 16 31, 29 deaths, Rio de Janeiro March 16 31, 9 deaths

Ceylon Colombo, March 23 30, 1 case, 1 death

China Hongkong March 23 30, 13 cases, 13 deaths

Colombia Panama April 22 29, 5 cases, 3 deaths

Egypt Cairo, April 8 15, 1 death

France Marseilles, March 1 31, 3 deaths, Paris, April 13 20, 11 deaths

Great Britain England—Leeds April 13 20, 1 case Liverpool, April 13 20 2 cases Scotland Dundee, April 13 27, 4 cases Glasgow, April 19-26 10 deaths

Gibraltar April 7 21 2 cases

India Bombay, March 26 April 9, 10 deaths Karachi March 1 April 7 36 cases 7 deaths Madras March 16 29 21 deaths

Italy Sicily April 6 13 prevalent

Malta April 1 13, 6 cases

Mexico Mexico April 21 28 2 deaths Nuevo Laredo, April 13 20 1 death

Yucatan Merida, three or four deaths daily

Netherlands Amsterdam April 13 29 1 case

Russia Moscow March 30 April 13, 15 cases, 4 deaths Odessa, April 6 10 13 cases 3 deaths St Petersburg April 6 13, 9 cases, 2 deaths Warsaw, March 31 April 13, 14 deaths

Straits Settlements Singapore March 16 23 2 deaths

Spain Corunna April 20 27 1 death, Malaga March 16 31 3 deaths

Turkey Smyrna March 17 April 14 1 death

YELLOW FEVER

Brazil Rio de Janeiro March 16 31, 42 deaths

Cuba Havana April 20 27 1 case

Mexico Vera Cruz April 20 27 1 death, resident for ten years

CHOLERA.

India Bombay March 26 April 2 10 deaths Madras, March 16-29 3 deaths

PLAGUE

Africa Cape Town April 6 13 43 cases 22 deaths

China Hongkong March 23 30 14 cases 10 deaths

India Bombay March 26 April 9 1407 deaths Karachi, March 24 April 7 429 cases 338 deaths

Japan Wakayama Ken April 12 1 case, 1 death

Association News

General Executive Committee

The first meeting of the General Executive Committee of the AMERICAN MEDICAL ASSOCIATION, will be held in Parlors 2 and 3, Hotel Ryan, St Paul, Minn, on Monday, June 3, 1901, at 5 p m A full attendance is requested, in order that the committee may get to work early and be ready for business referred to it by the ASSOCIATION Subsequent daily meetings will be held in the same place, and about the same hour daily unless otherwise ordered by the committee L DUNCAN BULKLEY, M D, secretary

Hotel Arrangements at St Paul

Interest in the St Paul meeting of the ASSOCIATION, as shown by the large number of rooms reserved in advance is evidently widespread and enthusiastic, and everything promises a very large gathering The hotels are making every

effort to locate guests comfortable and without crowding and there is every reason to believe that however large the number of delegates all will be comfortably accommodated In addition to the large number who can be received in the hotels of St Paul and her sister city Minneapolis the Committee on Hotel Arrangements has secured fifteen hundred rooms in private families of St Paul, which will be placed at the disposal of those who find the hotels crowded With characteristic hospitality the ladies of St Paul have opened their homes to the visiting physicians and the best that the city has will be provided for their accommodation The rooms in private houses are in many respects much to be preferred to rooms in hotels which are in the crowded condition customary in convention times The rooms secured are situated in the neighborhood of the center of the city, just on the verge of the residence districts and are convenient to the headquarters and assembly rooms The rates for rooms vary from $1 00 to $1 50 per day and where two persons occupy a room together from $1 50 to $2 00 In many instances breakfast will be served with a slight additional charge and the other meals can be obtained at the restaurants At the depots, hotels registration room and other gathering points members of the hotel committee will be in attendance with a list of pleasant rooms and a corps of messenger boys and when the visiting physician finds that he can not obtain quarters to his taste at the hotels, he will be provided with a room in a private family and sent under the guidance of a messenger to the place In this way it will not be necessary to tramp from one hotel to another in vain search for a place to stay and the Committee will do its utmost to have every visiting physician comfortably located immediately on his arrival If those who can not find accommodations to their liking at the first hotel they visit will consult the Committee at once they will be spared much useless effort and disappointment

In convention times it is not unusual that every one wants to be located at headquarters This is manifestly impossible in a meeting so large as that of the ASSOCIATION, and it will be necessary for visiting physicians to make arrangements at other hotels The demand for single rooms is larger than can be supplied and it is earnestly requested that the spirit of self sacrifice be shown to the greatest extent consistent with reasonable comfort If all guests were supplied with single rooms the capacity of the hotels would be cut in half, and many worthy ones would be turned away It is consequently recommended that as far as possible each member arrange with a friend to occupy a room together In this way many will not have to suffer through the carelessness or thoughtlessness of a few Doubling up will be avoided as far as possible

The Committee on Hotel Arrangements has secured rates from the hotels which are the usual and customary tariff in non convention times, with the exception that where one person wishes to occupy a room that ordinarily accommodates two persons he will be expected to pay for two less the charge for meals for one For instance if the rate for two people in a room is $3 each, the person occupying that room alone will be expected to pay $4 or $4 50 This will be seen at a glance to be fair and reasonable In no case except as indicated above have the rates in hotels been raised It is desired as far as possible that those members who intend to go to St Paul shall make their reservations at once, to avoid trouble and delay on arrival All requests for rooms should be addressed to the hotels or to Arthur Sweeney, M D, Chairman Committee on Hotels St Paul, Minn

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Program for St Paul Meeting

Following are the lists of papers to be presented before the several Sections at the Meeting of the ASSOCIATION

SECTION ON PRACTICE OF MEDICINE

TUESDAY JUNE 4—AFTERNOON SESSION—2 P M

1 Address of Chairman J M ANDERS, Philadelphia
2 Appendicitis, Pathological Anatomy, Diagnosis and Treatment JOHN B DEAVER Philadelphia
Discussion opened by I N LOVE, New York, PHILIP D MARVEL, Atlantic City, A A JONES, Buffalo
3 Inoculation of Malarial Fevers through the Agency of Mosquitos A Further Consideration I A WORDIRT, Philadelphia
4 Some Phases of Malaria J B MCLEROY Stovall Miss
5 Clinical Observations in Malaria G W HUDSPETH Little Rock Ark
Discussion of papers 3 4 5 by WM KRAUSS, Memphis, Tenn, GEO DOCK Ann Arbor, Mich WHITE GLENDOWER OWEN White Castle La and WM BRITT BURNS, Memphis Tenn

WEDNESDAY JUNE 5—FORENOON SESSION—9 A M

6 The Chemical and Microscopic Value of Blood Examinations W D KELLY, St Paul Minn
7 Pernicious Anemia, Report of a Series of Cases THOMAS MCCRAE, Baltimore Md
8 The Leucocyte Count in Hemorrhage GEORGE DOUGLAS HEAD, Minneapolis, Minn
9 Some Thoughts in Immunity I A MCSWAIN Paris, Tenn
10 Acromegally Presenting Features of Interest CHAS LYMAN GREENE, St Paul Minn
11 The Oxygen Treatment in So called Uric Acid Lesions ALFRED C CROFTAN, Philadelphia
12 Osomotic Pressure and its Relation to Uremic Manifestations HEINRICH STERN, New York
13 Rheumatic Simulants J J WALSH, New York

WEDNESDAY, JUNE 5—AFTERNOON SESSION—2 P M

SYMPOSIUM ON SOME CIRRHOSES OF THE LIVER

14 Circulatory Disturbances Accompanying Cirrhoses with Inosculation of the Portal Branches with Systemic Veins CHARLES G STOCKTON, Buffalo, N Y
15 Cirrhoses of the Liver in Children WM C HOLLOPETER, Philadelphia Pa
16 The Cause of Ascites J C WILSON, Philadelphia, Pa
17 Cirrhoses with Pigmentation T B FLETCHER, Baltimore, Md
18 Relation of Intestinal Intoxications to Hepatic Cirrhoses JUDSON DALAND, Philadelphia, Pa
19 Cirrhoses of the Liver Due to Metallic Poisons VICTOR C VAUGHAN, Ann Arbor, Mich
20 Treatment of Cirrhoses of the Liver J H MUSSER, Philadelphia Pa
Discussion GEORGE DOCK, Ann Arbor, Mich, FRANK BILLINGS, Chicago, JAMES TYSON, Philadelphia, Pa, J B MARVIN, Louisville Ky, B G HENNING, Memphis Tenn, ALFRED STENGEL Philadelphia
Open discussion on Etiology and Pathology of Cirrhoses J B HERRICK, Chicago, J A WITHERSPOON, Nashville, Tenn LOUIS F BISHOP, New York

THURSDAY, JUNE 6—FORENOON SESSION—9 A M

21 Modified Treatment of Typhoid Fever T B GREENLEY, Meadow Lawn Ky
22 Medical Shock O T OSBORNE, New Haven Conn
23 Dyspepsia as a Brain and Nerve Strain Disease CHAS H HUGHES, St Louis Mo
24 The Treatment of Pneumonia EDWARD F WELLS, Chicago
25 Spread of Tuberculosis by Coughing E NAPOLEON BOSTON, Philadelphia
26 Tuberculosis as Determined by Cause and Mode of Onset LOUIS FAUGERES BISHOP, New York
27 Practical Value of Cultures from the Throat M H FUSSELL, Philadelphia
28 Genito Urinary Examinations for the General Practitioner, with Demonstrations on Patient FRED C VALENTINE, New York

THURSDAY, JUNE 6—AFTERNOON SESSION—2 P M

SYMPOSIUM ON PERICARDITIS

29 Clinical Observations in Pericarditis FRANK BILLINGS, Chicago
30 Pathology and Pathogenesis of Pericarditis JOS MCFARLAND, Philadelphia
31 The General Etiology of Pericarditis ROBERT B PREBLE, Chicago
32 Relation of Pericarditis to Endocarditis and Myocarditis ALFRED STENGEL, Philadelphia
33 Adherent Pericardium ROBERT H BABCOCK, Chicago
34 Tuberculous Pericarditis CHAS E MCGAHAN, Aiken S C
35 Cardiac Lesions as Observed in the Negro, with Special Reference to Pericarditis FRANK A JONES, Memphis Tenn

36 Some Points in the Treatment of Pericarditis
FRANK PARSONS NORBURY, Jacksonville, Ill
Discussion on Pericarditis by HENRY B FAVILL, Chicago, J H MUSSER, Philadelphia, J J WALSH, New York, DELANCEY ROCHESTER Buffalo, N Y, O T OSBORNE New Haven Conn, D D SAUNDERS Memphis Tenn

FRIDAY, JUNE 7—FORENOON SESSION—9 A M

SYMPOSIUM ON SMALLPOX

37 A Further Report on Pseudo or Modified Smallpox
J J HAPPEL, Trenton, Tenn
38 Smallpox the Old and the New
W L BEEBE, St Cloud, Minn
39 Remarks Covering the Sanitary Features of Smallpox
WM KRAUSS, Memphis, Tenn
40 The Diagnosis and Treatment of Smallpox
E H POMEROY Calumet Mich
41 The Diagnosis of Mild Smallpox as in the Present Outbreak of the Smallpox in this Country
HERMAN SPALDING, Chicago
42 The Distinguishing Characteristic Between Mild Discrete Smallpox and Chickenpox
FREDERICK LEAVITT, St Paul, Minn
43 Smallpox H M BRACKEN, St Paul, Minn
Discussion on Smallpox by J J WALSH, New York, LOUIS LEROY Nashville Tenn, THOS WM CORLETT Cleveland O J D SMYTHE, Greenville, Miss and F S RAYMOND, Memphis Tenn

The foregoing will be a joint session with the Section on Hygiene and Sanitary Science

FRIDAY, JUNE 7—AFTERNOON SESSION—2 P M

SYMPOSIUM ON SERUM AND ORGANOTHERAPY

44 Mode of Manufacture of Serums and Organo-Extracts
CHAS T MCCLINTOCK, Detroit, Mich
45 Utility of Antitoxin Serums
JOSEPH MCFARLAND, Philadelphia
46 Further Observations on Serum Therapy in Croupous Pneumonia J C WILSON, Philadelphia
47 Anti Tubercle Serum
E A DE SCHWEINITZ, Washington D C
Informal discussion to be opened by SIMON FLEXNER, Philadelphia
48 Theory and Practice of Organotherapy
S SOLIS COHEN, Philadelphia
49 Acromegaly Treated with Pituitary Body
SIDNEY KUH, Chicago
50 Treatment of Graves Disease with Thymus Gland
JOHN M DODSON, Chicago
Informal discussion opened by VICTOR C VAUGHAN, Ann Arbor, Mich

A JOINT DISCUSSION WITH THE SECTION ON MATERIA MEDICA AND THERAPEUTICS

SECTION ON HYGIENE AND SANITARY SCIENCE

MEETS IN MASONIC ARMORY

TUESDAY, JUNE 4—2 P M

1 Tonsillar Inflammations Their Diagnosis, Bacterial Pathology, Treatment and Quarantine
WILLIAM G BISSELL, Buffalo, N Y
2 Pulmonary Fearlessness WM T ENGLISH, Pittsburg
3 A Medical Examination as a Prerequisite to Marriage
J C BATESON, Scranton, Pa
4 State Supervision of Marriage, Its Feasibility, Scope, Justification, Possibilities W H HEATH, Buffalo, N Y

WEDNESDAY, JUNE 5—9 A M

5 The Limitations of Venereal Diseases
DENSLOW LEWIS, Chicago
To be discussed by FERD C VALENTINE, New York, C A L REED, Cincinnati, HOWARD A KELLY, Baltimore, and JOSEPH PRIEL, Philadelphia
6 Tuberculosis in Children
SHERMAN G BONNEY, Denver, Colo
7 Tuberculosis in the Illinois Penitentiary
T J O'MALLEY, Joliet, Ill

WEDNESDAY, JUNE 5—2 P M

8 Tuberculosis in Prisons and Asylums
H M BRACKEN, Minneapolis
9 Tuberculosis Sanitaria C P AMBLER, Asheville, N C
10 Tuberculosis in the Middle States, and its Curability
JOHN A ROBISON, Chicago
Discussion of Institutions and Tuberculosis to be opened by A C KLEBS, Chicago, and S A KNOPF, New York City
11 The Proper Management of the Tubercular Lung
NORMAN BRIDGE, Los Angeles, Cal
12 The Relation of Sputum to the Spread of Tuberculosis
C L MINOR, Asheville, N C

THURSDAY, JUNE 6—9 A M

13 Tuberculosis of Animals in Some of its Relations to Human Tuberculosis
D E SALMON, D V M, Washington, D C
14 The Experience of Syracuse, N Y, with the Compulsory Tuberculin Test of all Dairies Furnishing Milk to the City B S MOORE, Syracuse N Y
Discussion to be opened by M H REYNOLDS, St Anthony s Park, Minn
15 The Climatology of Arizona with Reference to the Treatment of Pulmonary Tuberculosis
R W CRAIG, Phoenix Ariz
16 Tuberculosis in its Relation to the Welfare of the People of the United States in General and Colorado in Particular WM M DANNER, Denver, Colo
Discussion to be opened by R H BABCOCK, Chicago

FRIDAY, JUNE 7—9 A M

There will be a joint symposium held by this Section and that of Practice of Medicine on Smallpox

SECTION ON OBSTETRICS AND DISEASES OF WOMEN

FIRST DAY TUESDAY, 2 P M

Address of Chairman DR H P NEWMAN, Chicago
1 Methods of Incision for Vaginal Section
J CLARENCE WEBSTER, Chicago
2 Indications for Vagino Abdominal Hysterectomy
RUFUS B HALL, Cincinnati
3 The Accidents and Complications of Pelvic Surgery and their Treatment J B DEAVER, Philadelphia
4 Post Operative Intra Peritoneal Hemorrhage
A H CORDIER, Kansas City, Mo
5 Contributing Factors in the Production of Peritonitis
J G CLARK, Philadelphia
6 The Advantages and Disadvantages of Drainage after Abdominal Section HUNTER ROBB, Cleveland

WEDNESDAY, 9 A M

7 Atresia hymenalis O THIENHAUS, Milwaukee, Wis
8 Result Immediate and Remote of Conservative Surgery
A GOLDSPOHN, Chicago
9 Electrothermic Hemostasis in Abdominal and Pelvic Surgery A J DOWNES, Philadelphia
10 The Uses and Abuses of Morphine in Abdominal Surgery
L H DUNNING, Indianapolis

WEDNESDAY, 2 P M

11 Fibroids THOMAS S CULLEN, Baltimore
12 The Complications and Degenerations of Fibroid Tumors as Bearing on the Treatment of these Growths
CHAS P NOBLE, Philadelphia
13 How Shall we Deal with Uterine Myomata?
E E MONTGOMERY, Philadelphia
14 A New Operation for Extirpation of Cancer of the Rectum
M D MANN, Buffalo, N Y (By invitation)
16 The Various Incisions Appropriate to Different Renal Operations HOWARD A KELLY, Baltimore
17 The Relative Merits of the Different Methods of Ureteroureteral Anastomosis
J WESLEY BOVEE, Washington, D C
15 Carcinoma of the Uterus J M BARDY, Philadelphia

THURSDAY, 9 A M

18 Treatment of Posterior Displacements of the Uterus
A. H GOELET, New York
19 Surgical Treatment of Retroversion of the Uterus
FRANKLIN H MARTIN, Chicago
20 A New Operation for Retro Displacement of the Uterus
EMIL RIES, Chicago
21 The Increasing Sterility of American Women
GEORGE J ENGELMANN, Boston

THURSDAY, 2 P M

22 Obstetrics as a Specialty JOS PRICE, Philadelphia
23 Position of the Patient During Delivery
W D POPTER, Cincinnati

24 Asepsis in Midwifery J Gustave Zinke Cincinnati
25 Puerperal Asepsis J I Moran Washington, D C
26 Indications and Contraindications for the use of the Curette in Obstetric Practice
H D Fry, Washington D C
27 Advantage of Drill upon the Manikin
Eliza H Root, Chicago
28 A Case of Streptococcus Infection following Labor, Operation, Recovery W H Humiston, Cleveland
29 Ectopic Gestation W H Wathen, Louisville
30 Extrauterine Pregnancy F F Lawrence, Columbus
31 Abdominal Section During Pregnancy
W W Potter, Buffalo, N Y (By invitation)

Friday, 9 A M

32 Puerperal Eclampsia Its Etiology and Treatment
T J Beattie, Kansas City, Mo
33 Pregnancy Following Ventro suspension of the Uterus
Reuben Peterson, Chicago
34 Cesarean Section as a Method of Treatment for Placenta Previa W J Gillette, Toledo
35 Some Results of Ovarian Surgery with Further Report Upon Intrauterine Implantation of Ovarian Tissue
A Palmer Dudley, New York
36 Gall stones and Insane Women
W P Manton, Detroit, Mich

SECTION ON SURGERY AND ANATOMY

Tuesday, June 4—Afternoon Session

Surgery of the Brain and Spinal Cord

1 Remarks on the Surgery of the Spinal Cord, with Illustrative Cases Andrew J McCosh, New York City
2 Spina Bifida, with the Report of an Interesting Case
Paul F Eve, Nashville Tenn
3 The Methodical Exploration of the Brain for Fluid
Christian Fenger, Chicago
4 The Immediate and Remote Effects of Brain Injury
D S Fairchild, Clinton, Iowa
5 Cases of Trephining for Pathological Lesions of the Brain
John C Munro, Boston
Discussion opened by W W Keen, Philadelphia Discussion continued by Wm L Rodman, Philadelphia and Angus McLean, Detroit, Mich

Wednesday, June 5—Morning Session

6 The Mortality of Appendicitis
John B Deaver, Philadelphia
7 Some Unusual Features of Appendicitis and Their Treatment Ernest Laplace Philadelphia
8 Abdominal Contusions Associated with Rupture of the Intestine Homer Gage, Worcester, Mass
9 The Knot Within the Lumen in Intestinal Surgery, with Report of Eight Cases F Gregory Connell, Chicago
10 Surgery of the Colon H O Walker, Detroit, Mich
Discussion opened by Willis G McDonald, Albany, N Y (by invitation), D A K Steele, and F C Schaefer, Chicago

Wednesday June 5—Afternoon Session

The Surgical Aspect of Carcinoma

11 The Nature of the Cancerous Process
Roswell Park, Buffalo, N Y
12 The Present Status of the Carcinoma Question
Nicholas Senn, Chicago
13 Early Diagnosis of Carcinoma Methods
Charles A. Powers, Denver, Colo
14 The Pathology of Breast Carcinoma and its Relation to Early Diagnosis and Treatment
Wm S Halsted and J C Bloodgood, Baltimore Md
15 Carcinoma of the Cecum Wm J Mayo Rochester, Minn
16 Improved Method for Resecting High Rectal Carcinoma
Robert F Weir, New York City
17 Method of Operating on Carcinoma of the Tongue
J Collins Warren, Boston
18 Treatment of Malignant Diseases by Surgical Operation
Frederic S Dennis, New York City

Thursday, June 6—Morning Session

19 Hemostasis in Amputation at the Hip Joint, a Résumé of 262 Cases by the Author's Method
John A Wyeth, New York City
20 Autoplastic Suture in Hernia and other Ventral Wounds
L L McArthur, Chicago
21 A New Method of Skiagraphic Diagnosis for Renal and Ureteral Surgery
L F Schmidt and G Kotischer Chicago
22 Prostatotomy versus Prostatectomy for Prostatic Hypertrophy Ramon Guiteras, New York City
23 Prostatectomy, the Method of Choice in the Management of Prostatic Obstruction
Eugene Fuller, New York City
24 A Further Report on Permanent Catheterization
J R Eastman, Indianapolis Ind
25 Fallacies in the Treatment of Urethral Diseases
Robert Holmes Greene, New York City
Discussion opened by Robert H W Dawbarn, New York City

Thursday, June 6—Afternoon Session

The Surgery of the Chest

26 Pneumectomy and Pneumotomy J B Murphy, Chicago
27 Insufflation of the Lungs and its Application to Pulmonary Surgery Rudolph Matas New Orleans, La
28 Removal of Foreign Bodies from the Trachea and Bronchi
DeForest Willard, Philadelphia
29 Treatment of Empyema James H Dunn, Minneapolis
30 Decortication of the Lung
George Ryerson Fowler, Brooklyn N Y
Discussion opened by Frederick W Parham New Orleans La and continued by A C Bernays, St Louis, Mo

Friday, June 7—Morning Session

31 Abdominal Surgery Maurice Richardson, Boston
32 The Indications for and Against Total Removal of the Human Stomach
G Childs Macdonald, San Francisco Cal
33 Diagnosis and Treatment of Kidney Stone
Arthur D Bevan, Chicago
34 The Surgery of the Gall Bladder and Gall Ducts
Alexander H Ferguson, Chicago
35 Acute Infective Cholangitis and Cholecystitis as a Complication of Gall Stones
Daniel N Eisendrath, Chicago
36 Dissecting Abscesses of Abdominal Wall Producing Symptoms Simulating Pott's Disease of the Spine
James B Bullitt, Louisville, Ky
37 Experimental and Clinical Observations on the Therapeutics of Abdominal Surgery
George W Crile, Cleveland Ohio
Discussion opened by Howard A Kelly, Baltimore, Md and Frank D Smythe, Memphis, Tenn

Friday, June 7—Afternoon Session

38 The Roentgen Rays in Differentiating between Osseous Cyst, Osteosarcoma and Osteomyelitis with Skiagraphic Demonstration Carl Beck, New York City
39 Fracture of the Femoral Neck
C E Ruth, Keokuk, Iowa
40 Gynecology Its Contribution to Surgery
Henry O Marcy, Boston, Mass
41 A Simple Operation for the Treatment of Hemorrhoids
J Rawson Pennington, Chicago

SECTION ON NERVOUS AND MENTAL DISEASES

Meets in Committee Room of State Capitol

Tuesday, June 4—Afternoon Session—2 o'clock

1 Address of Chairman H A Tomlinson, St Peter, Minn
2 Etiology of Paretic Dementia
Frank P Norbury, Jacksonville, Ill
3 Symptomatology of Cerebral Hemorrhage
F Savary Pearce, Philadelphia
4 Treatment of Cerebral Hemorrhage
D R Brower, Chicago
5 The Virile or Genesiac Reflex as Pudic Nerve Innervation Phenomena C H Hughes, St Louis, Mo
6 A Case of Alexia Caused by a Bullet Wound with Successful Location and Removal of the Latter
G W McCaskey, Fort Wayne, Ind
7 What Can Be Done for the Epileptic in a Medical Way
R H Popter, Chicago
8 The Treatment of the Acute Psychoses in Private Practice
C Eugene Riggs, St Paul, Minn
9 Treatment of Neurasthenia
J G Biller, Cherokee, Iowa

10 A Case of Acute Poliomyelitis Anterior in a Youth of 18 Years Remarks on the Sensory Symptoms
FRANK R FRY, St Louis, Mo

WEDNESDAY, JUNE 5—AFTERNOON SESSION—2 O'CLOCK

SYMPOSIUM ON SYPHILIS OF THE BRAIN

(This Symposium is arranged with special reference to the needs of the general practitioner)

11 Nervous Manifestations HUGH T PATRICK, Chicago
12 The Psychosis in Cerebral Syphilis
RICHARD DEWEY, Wauwatosa, Wis
13 Syphilis of the Nervous System, its General Pathology, with Remarks on Treatment
F W LANGDON, Cincinnati, Ohio
14 The Specific and Non specific Lesions Resulting from Syphilis, and Their Influence upon Diagnosis, Prognosis and Treatment J T ESKRIDGE, Denver, Colo
15 Suggestions for Lessening the Frequency of Relapse After Treatment of Morphinism
A J PRESSEY, Cleveland, Ohio
16 Injuries, Feigned and Real, with their Differentiation and Medicolegal Aspect LAMBERT OTT, Philadelphia
17 The Psychoses of Chorea HAROLD N MOYER, Chicago
18 Three Cases of Paralysis of the Serratus Magnus and the Trapezius—Alar Scapula
AUGUSTUS A ESHNER, Philadelphia
19 Mirror Writing and Inverted Vision
ALBERT B HALE AND SYDNEY KUH, Chicago
20 Fear as an Element of Nervous Diseases and Its Treatment
JOHN PUNTON, Kansas City, Mo

THURSDAY, JUNE 6—AFTERNOON SESSION

21 Ten Cases of Multiple Neuritis
W A JONES, Minneapolis, Minn
22 A Case of Localized Amnesia with Remarks Thereon
EDWARD E MAYER, Pittsburg, Pa
23 Dementia Following Inebriety
T D CROTHERS, Hartford, Conn
24 The Problem of Heredity
JAMES G KIERNAN, Chicago
25 The Importance of Heredity as a Cause of Insanity
ARTHUR MCGUGAN, Kalamazoo, Mich
26 Persistent Brachial Neuralgia from Hypodermic Injection Incipient Lateral Sclerosis with Recovery
LEO M CRAFTS, Minneapolis, Minn
27 Space Neuroses JOHN E PURDON, Turlock Cal
28 Autotoxemia as a Factor in the Neuroses
GEORGE F BUTLER, Alma, Mich
29 The Circulation in the Nervous System
HERMAN GASSER, Platteville, Wis
30 Sudden and Temporary Mental Aberration—Unconscious Automatism—Temporary Irresponsible States
SAMUEL AYERS, Pittsburgh, Pa
31 A Case of Myasthenia Gravis
HALDOR SNEVE, St Paul, Minn

SECTION ON OPHTHALMOLOGY

TUESDAY, JUNE 4, 1901—AFTERNOON SESSION

1 Address of Chairman
2 Treatment of Strabismus, Measures Other than Operative
DR EDWARD JACKSON, Denver, Colo
3 Treatment of Strabismus, Operative Measures
DR C F CLARK, Columbus, Ohio
4 Strabismus Its Treatment
DR A E DAVIS, New York City (By invitation)
5 The Cosmetic and Visual Results in Squint
DR J M RAY, Louisville, Ky
Discussion opened by DRS C M OLIVER, FRANK ALLPORT, and F C TODD
6 Concerning the Check Ligament
DR J E COLBURN, Chicago, Ill

WEDNESDAY, JUNE 5—MORNING SESSION

EXHIBITION OF SPECIMENS AND NEW INSTRUMENTS—FIFTIETH ANNIVERSARY OF THE INVENTION OF THE OPHTHALMOSCOPE—EXHIBIT OF OPHTHALMOSCOPES AND OPHTHALMOSCOPIC LITERATURE

Address on the Origin and Development of the Instrument, Together with a Description of the Historic Exhibit of Ophthalmoscopes and Publications on Ophthalmoscopy Prepared for this Meeting
DR H FRIEDENWALD, Baltimore, Md
Address on the Life of Helmholtz
DR CASEY A WOOD, Chicago, Ill
7 The Comparative Values of Hyoscin, Atropin, Homatropin and Scopolamin as Cycloplegics
DR C H BAKER, Bay City, Mich
Discussion opened by DRS LEARTUS CONNOR and C M COBB
8 Tarsadenitis Meibomica
DR M F WEYMANN, St Joseph, Mo
9 Report of a Case of Retroflexion of the Iris
DR A A HUBBELL, Buffalo, N Y
Discussion opened by DR EUGENE SMITH, of Detroit.

WEDNESDAY, JUNE 5—AFTERNOON SESSION

10 Treatment of Heterophoria, Non Surgical Measures
DR GEORGE M GOULD, Philadelphia
11 Treatment of Heterophoria, Surgical Treatment
DR G C SAVAGE, Nashville, Tenn
Discussion opened by DR S D RISLEY
12 Table of Paralyses of Ocular Muscles
DR H M STARKEY, Chicago, Ill
Discussion opened by DRS F C HOTZ and WM WILDER
13 The Extraction of Hard Cataract without Iridectomy
DR S D RISLEY, Philadelphia, Pa
Discussion opened by DRS H V WUERDEMANN and F C HOTZ
14 Relation of Asthenopia to Disturbances of the Digestive System DR JOHN MCREYNOLDS, Dallas, Texas
Discussion opened by DRS C A WOOD and J E WEEKS
15 Ocular Lesions Associated with Constitutional Diatheses
DR H I JONES, San Francisco, Cal
Discussion opened by DR W F SOUTHARD

THURSDAY, JUNE 6—MORNING SESSION

EXHIBITION OF SPECIMENS AND NEW INSTRUMENTS

16 Economic Limitations of the Visual Acuity in the Various Trades and Professions
DR H V WUERDEMANN, Milwaukee, Wis
17 Further Report on the Visual and Aural Qualifications of Transportation Employees
DR FRANK ALLPORT, Chicago, Ill
18 Mules' Operation With Cases
DR FRANK C TODD, Minneapolis, Minn
Discussion opened by DR L WEBSTER FOX, and FRANK ALLPORT
19 Plastic Operations for the Preservation of Sightless Stumps DR HAROLD GIFFORD, Omaha, Neb
20 Report of Two Cases of Orbital Surgery
DR ADELINE PORTMAN, Washington
21 Enucleation in Two Minutes, with Demonstration
DR A T MITCHELL, Vicksburg, Miss

THURSDAY, JUNE 6—AFTERNOON SESSION

22 The Newer Pathology of the Retina, with Special Reference to the Changes Produced in the Ganglion Cells by Certain Toxic Agents
DR H FRIEDENWALD, Baltimore, Md
23 Atrophy of the Retina
DR D S REYNOLDS, Louisville, Ky
24 A Case of Blindness Due to Drinking Bay Rum Compared with Reported Cases Due to Methyl Alcohol and Jamaica Ginger DR H MOULTON, Fort Smith, Ark
Discussion opened by Dr H GIFFORD
25 Complete Recovery from Double Neuroretinitis, Clinically Resembling Albuminuric Retinitis, in a Case of Prolonged Hematuria with Symptoms of Bright's Disease
DR C A VEASEY, Philadelphia, Pa
26 Some Points to be Observed in the Use of the Perimeter
DR GEO F KEIPER, LaFayette, Ind
27 A Study of the Color Changes in Chromogenic Bacteria
DR C A OLIVER, Philadelphia, Pa
28 The Value of Excision of the Superior Cervical Ganglion of the Sympathetic, in Certain Eye Diseases
DR GEO F SUKER, Toledo, Ohio
Discussion opened by DR CASEY WOOD

FRIDAY, JUNE 7—MORNING SESSION

EXHIBITION OF SPECIMENS AND NEW INSTRUMENTS

29 Herpes Zoster Ophthalmicus with brief Report of Five Cases DR W C BANE, Denver, Colo
Discussion opened by DRS EDWARD JACKSON and H M STARKEY
30 The Corneal Lesions of Acquired Syphilis
DR WM H WILDER, Chicago, Ill
Discussion opened by DR S D RISLEY and C A WOOD

31 Lachrymal Stenosis in Infants and its Treatment
Dr Dunbar Roy, Atlanta Ga
Discussion opened by Dr G C Savage
32 Metamorphopsia Varians with a Report of Three Cases
Dr Wm H Dudley, Easton, Pa
Discussion opened by Drs J T Weeks and S D Risley
33 Injuries of the Choroid Dr T O Sisson, Keokuk Iowa
Discussion opened by Dr H V Wuerdemann and Cassius D Wescott
34 New Instrument for Determining Position of Axes of the Eyes Dr C H Williams, Boston, Mass
35 Spontaneous Clearing of a Cataractous Lens
Dr Hiram Woods, Jr, Baltimore, Md

SECTION ON DISEASES OF CHILDREN

MEETS IN RYAN ANNEX BUILDING EXCHANGE

TUESDAY, JUNE 4—AFTERNOON SESSION

1 Address of Chairman
Samuel W Kelley Cleveland Ohio
2 Physiologic and Pathologic Conditions of the Alimentary Tract in Children A L Benedict, Buffalo N Y
3 Measles I B Garber, Dunkirk Ind
4 The Pathology of Pertussis J M Postle, Hinckley, Ill
5 A Case of Pyloric Spasm in an Infant
C Herrman, New York City (By invitation)
6 The Use of Normal Salt Solution in the Diseases of Infancy
W C Holloppeter, Philadelphia
7 Rheumatic Endocarditis in Children
Edward F Wells, Chicago

WEDNESDAY JUNE 5—MORNING SESSION

SYMPOSIUM ON TYPHOID FEVER IN CHILDREN

8 Symptoms and Course of Typhoid Fever
J P Crozer Griffith, Philadelphia
9 Diagnosis of Typhoid Fever in the Laboratory
John Lovett Morse, Boston
10 Treatment of Typhoid Fever
H L Tuley, Louisville, Ky
11 Hydrotherapy in Typhoid Fever
James C Wilson, Philadelphia
12 The Treatment of Temperature by Drugs
Edwin Rosenthal Philadelphia
13 Dietetic Treatment of Typhoid Fever in Infants and Children Louis Fischer, New York City
14 The Treatment of Typhoid Fever with Special Reference to the Intrarectal Injection of Normal Salt Solution
F Stuver Fort Collins Colo
15 Multiple Gangrene Associated with Cholangitis Complicating Typhoid Fever Isaac A. Abt, Chicago
Discussion opened by Victor C Vaughan, Ann Arbor Mich, J M Anders, Philadelphia, and S Solis Cohen, Philadelphia

WEDNESDAY, JUNE 5—AFTERNOON SESSION

16 Prevention of Pulmonary Tuberculosis in Predisposed Children John A Robison, Chicago
17 The Diagnosis and Treatment of Catarrhal Pneumonia
S Solis Cohen, Philadelphia
18 Protracted Influenzal Pneumonia in Children
F X Walls, Chicago
19 Prolonged Intubations Edwin Rosenthal, Philadelphia
Discussion by Louis Fischer, New York, Rosa Engelmann, Chicago F X Waxham Denver, and William M Welch, Philadelphia
20 Congenital Malformations with Roentgen Ray Demonstrations Carl Beck, New York City
21 Membranous Colitis in Infants
Charles Douglas, Detroit, Mich
22 Gonorrhea in Boys
A L Wolbarst, New York City (By invitation)
Discussed by Ferd C Valentine, New York City
23 A Case of Ureteral Calculus in a Boy of Ten
W W Keen, Philadelphia
24 Diabetes Mellitus in Children A C Cotton, Chicago
25 Albuminuria in Disease of the Kidneys in Infancy and Childhood John R Rathmell, Chattanooga, Tenn
26 Congenital Cystic Kidney
William Jepson, Sioux City, Iowa

THURSDAY, JUNE 6—AFTERNOON SESSION

SYMPOSIUM ON SCHOOL HYGIENE

27 The Introduction and Management of School Hygiene
Leigh K Baker, Cleveland, Ohio
28 School Hygiene and its Problems
William H Burnham, Worcester, Mass
29 Physical Culture in Children and the Objects to be Attained John Madison Taylor, Philadelphia
30 The Pubescent School Girl
William Edgar Darnall, Atlantic City, N J
31 Diagnosis of the Backward Child
A W Wilmarth, Chippewa Falls, Wis
32 Speech as a Factor in the Diagnosis of the Backward Child
G Hudson Makuen, Philadelphia
33 A Plea for the Backward Child
C T Wahrer Fort Madison, Iowa
34 Some Considerations Regarding the Medical Criticisms of the Hygiene of Early School Life
J Nofr, Stoughton, Wis
Discussion opened by Joseph B Marvin, Louisville, W C Holloppeter, Philadelphia and Louis Fischer, New York City

SECTION ON STOMATOLOGY

TUESDAY, JUNE 4—2 P M

Chairman's Address R R Andrews, Cambridge, Mass

SYMPOSIUM ON STATE BOARDS OF DENTAL EXAMINERS IN THEIR RELATION TO THE PROFESSION AND THE COLLEGES

Methods of Appointment 1 By State Universities—New York 2 By State Boards of State Officials ex officio, Nebraska 3 By Governors on Recommendation of the Profession
William Carr, New York City
Revenue for Conducting the Work of the Boards of Examiners 1 By Taxation of the People 2 By Fees from Examination of Candidates 3 By Taxation of the Profession
George L Parmele, Hartford, Conn, and V E Turner, Raleigh N C
The Dental College Standard 1 Is it What it Should Be? 2 If Not What Improvements Should Be Made? 3 How May the Requirements be Improved?
Charles Chittenden, Madison, Wis
Licensing 1 By Examination 2 By Diploma
J A Libby, Pittsburg, Pa

WEDNESDAY, JUNE 5—2 P M

SYMPOSIUM ON DEGENERACY OF THE PULP

Preliminary Work Eugene S Talbot, Chicago
Literature of the Pulp Vida A Latham, Rogers Park, Ill
Cutting Staining and Mounting
Martha Anderson, Moline, Ill
Local Anesthesia A H Peck, Chicago
Paradental Atrophy W T Walker, Pass Christian, Miss
Periods of Stress and their Dental Marks
Jas G Kiernan, Chicago
Surgical Treatment of Cleft Palate
G V I Brown Milwaukee, Wis
Infectious Diseases Alice Steeves, Chicago
Simple Gingivitis Geo T Carpenter, Chicago

THURSDAY, JUNE 6—2 P M

Military Dental Practice Its Modifications and Limitations
Henry D Hatch, New York City
The Tongue as a Breeding Place for Bacteria
M H Fletcher, Cincinnati, Ohio
Pathology of the Alveolar Process
Eugene S Talbot, Chicago
Tuberculosis of the Alveolar Process and Surrounding Tissues and a Few Methods of Differential Diagnosis
V A Guden, Milwaukee, Wis

SECTION ON CUTANEOUS MEDICINE AND SURGERY

MEETS IN MASONIC BANQUET HALL

TUESDAY, JUNE 4—2 30 P M

1 Address of Chairman Ancient and Modern Conception of Syphilis William L Baum, Chicago
2 The Relations of the Menstrual Function to Tertian Diseases of the Skin
L Duncan Bulkley New York City
3 Pathology and Treatment of Cutaneous Cancer, with Special Reference to its Non parasitic Nature
M L Heidingsfeld, Cincinnati, Ohio

4 The Increasing Prevalence of Contagious Skin Diseases
HENRY W STELWAGON, Philadelphia
5 Syphilis and its Relations to Blastomycetic Dermatitis
HENRY G ANTHONY, Chicago
6 Adenoma Sebaceum of the Non symmetrical Type of Darier
WILLIAM S GOTTHEIL, New York City
7 Notes on a Case of Keratosis Follicularis (Porospermosis)
JOSEPH ZEISLER, Chicago

WEDNESDAY, JUNE 5—2 30 P M

8 Lantern Slide Demonstration on Skin Cancer
M L HEIDINGSFELD, Cincinnati, Ohio
9 Lantern Slide Exhibition Showing the Clinical, Pathological and Bacteriological Features of Eleven Cases of Blastomycosis of the Skin
JAMES NEVINS HYDE and FRANK HUGH MONTGOMERY, Chicago
10 Lantern Slide Demonstration of the Exanthemata, from Original Photographs
WILLIAM THOMAS CORLETT, Cleveland, Ohio
11 Demonstrations of Case Lupus Erythematosus Treated by Hot Air A Case of Leprosy in a Man born in and who has never been outside of Minnesota
BURNSIDE FOSTER, St Paul, Minn
12 Epidermolysis Bullosa Hereditaria
LOUIS E SCHMIDT, Chicago
13 Report of a Case of Epithelioma of Long Duration and Beginning in Early Manhood
WILLIAM FRICK, Kansas City, Mo
14 Notes on Recent Cases of Extra genital Chancres
L DUNCAN BULKLEY, New York City

THURSDAY, JUNE 6—2 30 P M

15 Rhinoscleroma
CHAS WARRENNE ALLEN, New York City (By invitation)
16 Dermatomycoses in their Relation to Allen's Iodid Test
JACOB SOBEL, New York City (By invitation)
17 Squamous Erythroderma
AUGUSTUS RAVOGLI, Cincinnati, Ohio
18 Phototherapy in Cutaneous Medicine A Preliminary Communication WILLIAM S GOTTHEIL, New York City
19 Lichen Hypertrophicus DAVID LIEBERTHAL, Chicago
20 Feigned Skin Diseases
GEORGE W DAVIS, Kansas City, Mo
21 Clinical Features of Blastomycetic Dermatitis as Observed in Three Cases by the Author
A W BRAYTON, Indianapolis, Ind
22 Treatment of Psoriasis T P WHALEY, Charleston, S C

SECTION ON LARYNGOLOGY AND OTOLOGY

TUESDAY, JUNE 4—2 P M

1 Address of Chairman JOHN N MACKENZIE, Baltimore, Md
2 Remarks on the Treatment of Laryngeal Tuberculosis
P S DONNELLEAN, Philadelphia, Pa
3 The Treatment of Laryngitis O T FREER, Chicago
4 Edematous Laryngitis with Report of Case
J S GIBB, Philadelphia
5 Types of Membraneous Pharyngitis
W E CASSELBERRY, Chicago
6 Total Extirpation of Thyroid Gland G F COTT, Buffalo
7 Foreign Bodies in the Bronchi
F J QUINLAN, New York City

WEDNESDAY, JUNE 5—9 A M

8 The Manifestations of Luetic Disease in the Upper Respiratory Passages and Ear
W SCHEPPEGRELL New Orleans, La
9 Observation on Intranasal Contract and its Consequences
J E SCHADLE, St Paul, Minn
10 The Relation of the Middle Turbinate Body to Chronic Nasal Diseases C S BAKER, Bay City, Mich
11 The Pathology of Inflammation of the Posterior Part of the Nasal Septum J L GOODALE, Boston
12 Asthma as a Result of Nasal Conditions Treatment, etc
J H FARRELL, Chicago
13 The Effect which the So called "Catarrhal" Disease of the Nose and Throat may have upon the General Health
C M COBB, Lynn, Mass

WEDNESDAY, JUNE 5—2 P M

14 Empyema of the Frontal Sinus
E FLETCHER INGALS, Chicago
15 Diseases of Accessary Sinuses
E L SHURLY, Detroit, Mich
16 Anomalies of the Frontal Sinus and their Bearing on Chronic Sinusitis
REDMOND W PAYNE, San Francisco, Cal
17 Carcinoma of the Nasopharynx
CHEVALIER JACKSON, Pittsburg, Pa
18 Sarcoma of Nasal Passages, with Report of Case
DUNBAR ROY, Atlanta, Ga
19 Case of Epithelioma of Upper Respiratory Tract
S A OREN, Lanark, Ill
20 The Supratonsillar Fossa J HOMER COULTER, Chicago
21 An Unusual Anomaly Affecting the Faucial Tonsil
GEORGE L RICHARDS, Fall River, Mass
22 Traumatic Affection of the Uvula
H SEYMOUR OPPENHEIMER, New York City
23 The Pathology of Adenoids in the Adult
A T MITCHELL, Vicksburg, Miss

THURSDAY, JUNE 6—9 A M

24 The Diagnosis and Treatment of Mastoiditis
E B DENCH New York City
25 Mastoiditis After Subsidence and Without Recurrence of Tympanic Disease HIRAM WOODS, JR, Baltimore, Md
26 Experiments on Fresh Cadaver in Relation to Suppurative Otitis Media and Mastoiditis
F C TODD, Minneapolis, Minn
27 Gelles's Test NORVAL H PIERCE, Chicago

THURSDAY, JUNE 6—2 P M

28 Report of a Case of Suppuration of the Parotid Gland with Suppuration of External Auditory Canal
F A PACKARD, Philadelphia
29 Report of Case of Unusual and Interesting Tertiary Manifestations G HUDSON MAKUEN, Philadelphia
30 Dangerous Hemorrhage after the Removal of Enlarged Tonsils and Adenoids, with Report of a Case
A C GETCHELL, Worchester, Mass
31 The Rationale and Technic of Pneumatic Aural Massage
B ALEX RANDALL, Philadelphia
32 Title to be announced
C W RICHARDSON, Washington, D C
33 Adrenalin Chloride in Surgery of the Nose and Throat
W W BULETTE, Pueblo, Colo

SECTION ON MATERIA MEDICA, PHARMACY AND THERAPEUTICS

MEETS IN SENATE CHAMBER STATE CAPITOL

TUESDAY, JUNE 4—2 P M

1 Modern Therapeutics GEORGE F BUTLER, Chicago
2 Experimental Work in Intra organic and Venous Injections and Blood Extracts in the Cure of Acute Organic Diseases W BYRON COAKLEY Chicago
3 Therapeutic Indications Presented by the Conditions of the Blood in Disease O T OSBORNE, New Haven
4 Chronic Myocarditis J H MUSSER, Philadelphia
5 Treatment of Obesity HEINRICH STERN, New York City
Discussion on Preceding papers to be opened by A R EDWARDS, Chicago
6 Treatment of Cancer by Roentgen Rays
FRANCIS WILLLIAMS, Boston
7 Treatment of Neurasthenia HAROLD N MOYER, Chicago

WEDNESDAY, JUNE 5—9 A M

8 The Importance of an Established Plan of Treatment in Chronic Cases and How it may be Attained by a Patient who must Travel L F BISHOP, New York City
9 A Plea for More Uniformity and Strength in our Armamentarium C F WAHRER, Fort Madison
10 Standardization of Crude Drugs and Galenical Preparations A B LYONS, Detroit
11 Report on Medicines Used by One Hundred St Louis Physicians H M WHELPLEY, St Louis
12 Analysis of Cascara Sagrada L L SOLOMON, Louisville

WEDNESDAY, JUNE 5—2 P M

SYMPOSIUM ON TREATMENT OF PULMONARY TUBERCULOSIS

13 Indication for and Utility of Altitude Treatment of Pulmonary Tuberculosis S E SOLLY, Colorado Springs
14 Adaptability of Southern California and Similar Climates to the Needs of Consumptives
NORMAN BRIDGE, Los Angeles

15 Specific Treatment of Pulmonary Tuberculosis
I L Shurly, Detroit
16 Tuberculin Treatment of Pulmonary Tuberculosis, with Statistics Charles Dennison, Denver
17 Specific Therapeutics in Pulmonary Tuberculosis
Arnold C Klebs, Chicago
18 Title not given J Edward Stubbert, Liberty, N Y
19 Nineteen Years Experience with Creosote in Tuberculosis
A Burroughs, Asheville, N C
Discussion of Treatment of Tubercular Disease of the Lungs to be opened by R H Babcock, Chicago
20 Treatment of Lobar Pneumonia
De Lancy Rochester, Buffalo
21 The Abortion Treatment of Pneumonia, a Plea for the Use of Cardiac Depressants in the Treatment of the Congestion Stage of Pneumonia
W T Dickerson, St Louis

Thursday June 6—9 a m

Symposium on Gastric Disorders

22 Influence of Certain Common Remedies upon Gastric Functions Boardman Reed, Philadelphia
23 Treatment of Gastric Ulcer Gustav Tuttefer, Chicago
24 Muriatic Acid in Gastric Diseases
Frank Billings, Chicago
25 Treatment of Gastric Hyperesthesia
Charles C Stockton, Buffalo
26 On Therapeutic Management of Dyspepsia from the Neurologist's Standpoint C H Hughes St Louis
Discussion of Gastric Disorders to be opened by James B Herrick, Chicago

Thursday, June 6—2 p m

Symposium on Organotherapy

27 Mode of Manufacture of Serums and Organ Extracts
Charles T McClintock, Detroit
28 Theory and Practice of Organotherapy
S Solis Cohen, Philadelphia
29 Acromegaly Treated with Pituitary Body
Sydney Kuh, Chicago
30 Treatment of Graves' Disease with Thymus Extract
John M Dodson, Chicago
31 Pharmacology of the Suprarenal Gland and a Method of Assaying its Products E M Houghton, Detroit
32 The Active Principle of Suprarenal Glands
Jokichi Takamine, New York
Discussion on Organotherapy to be opened by Victor C Vaughan Ann Arbor
33 The Future of Serum Therapy
Joseph McFarland, Philadelphia
34 Further Observations on Serum Therapy in Croupous Pneumonia J C Wilson, Philadelphia
35 Antitubercle Serum E A de Schweinitz, Washington
Discussion on Serumtherapy to be opened by Simon Flexner Philadelphia

SECTION ON PHYSIOLOGY AND DIETETICS

Meets in Builders Exchange, Ryan Annex

Tuesday, June 4—Afternoon Session

2 o'clock

1 Address of Chairman Food as a Principal Factor in the Causation of Disease
Elmer Lee, New York City
2 Artificially Prepared Foods
L Breisacher, Detroit Mich
3 Unsolved Problems in Physiological Chemistry
A L Benedict, Buffalo N Y
4 A Study of Tea and Coffee Intoxication
Heinrich Stern, New York City

Wednesday June 5—Afternoon Session

2 o'clock

5 The Evaluation of Anthropometric Data
Winfield S Hall Chicago
6 The Education of the Degenerate—A Physicobiologic Study John Madden, Milwaukee, Wis
7 The Nervous Relation in Diseases of the Nutritive System
H S Drayton, New York City
8 Isolation of the Active Principles of the Suprarenal Gland —A Review of the Work
T B Aldrich, Detroit, Mich

Thursday June 6—Afternoon Session

2 o'clock

9 ——— Geo P Dreyer, Chicago
10 Food Products from Diseased Animals
D E Salmon, Washington
11 The Teaching of Practical Dietetics in Medical Schools
R O Beard, Minneapolis
12 Some Problems of Nutrition
Alexander Haig, London Eng

SECTION OF PATHOLOGY AND BACTERIOLOGY

Meets in Ryan Annex

1 Giant Cell Embolism of Pulmonary Capillaries
Alfred S Warthin, Ann Arbor, Mich
2 Effect of Direct Alternating and Tesla Currents and X Rays on Bacteria F Robert Zeit, Chicago
3 Demonstration of Specimens Slides, and Photomicrographs of Uretero Intestinal Anastomosis
F Robert Zeit, Chicago
4 Primary Sarcoma of the Esophagus and Stomach
William Travis Howard, Cleveland, Ohio
5 Demonstration of the Van Gehuchten Nelis Histologic Resection for Hydrophobia and Remarks on Hydrophobia in Ohio
A P Ohlmacher, Gallipolis, Ohio
6 A Case of Complete Agenesia of the Central Visual System
Wm G Spiller, Philadelphia
7 Carcinoma of the Lung E R Le Count, Chicago
8 The Influence of Structure and Locality on Pathological Processes J S Ingle, Omaha, Neb

Wednesday, June 5—9 a m

Symposium on the Role of Certain of the Non Granular and Granular Somatic Cells in Infection

9 Technics The Origin, Fate and Significance of these Morphologic Elements H F Harris, Atlanta
10 The Plasma Cells in Acute and Chronic Infection
W T Councilman, Boston
11 The Endothelial Cells in Acute and Chronic Infection
E R Le Count, Chicago
12 The Eosinophilic Cells in Acute and Chronic Infection
Maximilian Herzog, Chicago
13 The Mast Cells in Acute and Chronic Infection
Herbert U Williams, Buffalo, N Y
14 Isolation of Bacillus Typhosus from Unusual and Interesting Localizations M Daniel, Minneapolis
15 Notes on the Bacteriology and Morbid Histology of Cerebrospinal Meningitis L B Wilson, Minneapolis

Wednesday, June 5—2 p m

16 Report on Cultures from two Cases of Dysentery
F F Westbrook, Minneapolis
17 A Study of a Fetal Stomach with Special Reference to the Origin of Acid secreting Cells
W A Evans and William Becker, Chicago
18 Some Studies of Venoms and Antivenin
Joseph McFarland, Philadelphia
19 Some Unusual Adeno carcinomas of the Breast
J Clark Stewart, Minneapolis
20 An Undescribed Abnormality of the Bile Ducts
J Clark Stewart, Minneapolis
21 Reports of a Case of Primary Carcinoma of the Appendix and a Case of Lympho Sarcoma of the Intestine, with a Discussion of the Etiology of the Latter
S M White, Minneapolis
22 On the Outgrowth of Epithelium Leo Loeb, Chicago
23 On the Etiology of Carcinoma G Futterer, Chicago

Thursday, June 6—9 a m

24 On the Nature and Significance of Granular Degeneration of Red Corpuscles
Alfred Stengel, C Y White and William Pepper
25 Study of an Epidemic among Guinea pigs in the Laboratory
V C Vaughan, Ann Arbor, for Louis M Gelston
26 The Influence of Boric Acid and Borax on Milk Bacteria
V C Vaughan, Ann Arbor, for William H Veenboer
27 The Influence of Formaldehyde on Milk Bacteria
V C Vaughan, Ann Arbor, for Arthur J Hood
28 Streptothrix Infections of Human Lung, a General Consideration of the Subject
Simon Flexner, Philadelphia

THE ST. PAUL MEETING

HISTORICAL

The Republic of the United States was already more than sixty years old when the first settlement was made upon the site of the present city of St Paul, the capital of the State of Minnesota This event which happened in the month of September, 1838, occurred some eighteen years later than the first settlement in that part of the country, the military post now Fort Snelling having been established in 1820 The first settler of St Paul built his cabin some four miles below and on the opposite bank of the river from the fort, and history, truthful but not poetic, records that the spot was selected not on account of the romantic beauties of the situation but because it was the most convenient place outside of military jurisdiction from which to sell whisky to the soldiers and Indians The fact that it was at the head of navigation on the Mississippi was undoubtedly the chief reason why the little claim shanty of 1838 was the forerunner of the city of 163,000 people in the year 1900

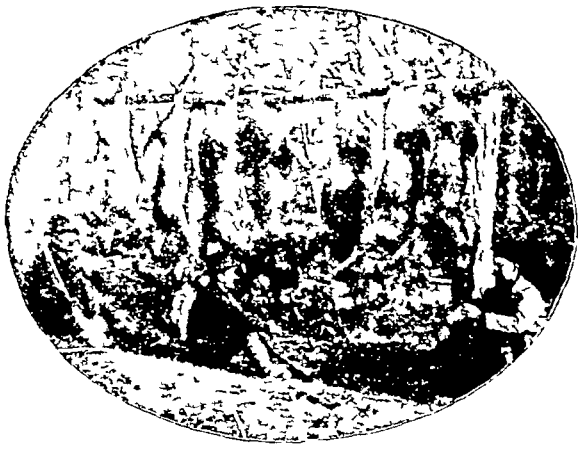
GEOGRAPHICAL

The city of St Paul is built for the most part upon the left bank of the Mississippi river, having due regard to the general course of the stream, the left bank should be the east bank but owing to a bend in the river the current runs east opposite the city making the left bank a north bank at this point The river valley at St Paul is narrow and deep, the surface of the stream being some 200 feet below the level of the prairie through which it runs The city is built upon three different levels or plateaus, which mark the various steps in the process of erosion that dug out the channel The lowest plateau, raised but little above the river, contains the railroads, the Union Depot and most of the wholesale district, upon the second level is a mixture of business houses and dwellings, while the chief residence portion of the town occupies the highest plateau that is the prairie itself, on the general level of the surrounding country A narrow river valley with high banks suggests picturesque scenery and the promise is amply fulfilled

Birds-eye View of Fort Snelling

by the superb views obtained from every point of vantage in the city up and down or across the river there is an endless variety of pictures of flowing stream, of green meadow of wooded slope of rocky cliff, or rounded bluff of deep ravine, pictures to which the hand of man has added a touch by stretching here and there an airy bridge across stream or chasm

St Paul has a right to beautiful scenery, for the state of which it is the capital is one of the fairest spots on earth Covering an area greater than that of the whole of New England with Maryland and Delaware added Minnesota presents a great variety of scene in its different parts In the North are almost boundless pine forests the home of the moose, deer and bear The center of the state is covered by an extensive belt of hard-wood timber much of it still virgin forest Southern Minnesota is greatly diversified here a level and there a rolling prairie interspersed with numerous groves and areas of timber Everywhere there are streams and lakes streams varying in size from the mighty Mississippi to the tiny trout brooks, lakes of an



DEER HUNTERS CAMP IN NORTHERN WOODS

infinite variety of size and shape, seven thousand of them within the state, from Red Lake in the north, the largest sheet of fresh water except Lake Michigan that is wholly within the boundaries of the United States, to little sheets of water just large enough to be "meandered" that is excluded from the surveyor's estimate of acreage It is to all these lakes and streams that the state owes its name, made up of Indian words describing the reflection of clouds in water

CLIMATE

The average temperature of St Paul is considerably below that of the cities farther east Albany, N Y, for instance, has an average temperature of 48 degrees, while that of St Paul is but 42 degrees It is to the much greater coldness of the winters that the lower temperature of the northwest is chiefly due The average period between killing frosts is a long one, from May 5 to October 6, while the warm months contain many days when the temperature is high The summer climate is delightful, for the air is fresh and free from moisture, making even the hot days agreeable On this account Minnesota has been much visited as a summer resort by the inhabitants of the cities lower down the Mississippi June may always be counted upon for warm and pleasant weather The records of the past thirty years show that the month has a mean temperature of 67 degrees with an average of twenty-three fair days, making the chances of pleasant weather better than three out of four Although warm days may be looked for at this season, the evenings are often cool, and light overcoats are frequently in demand after dark

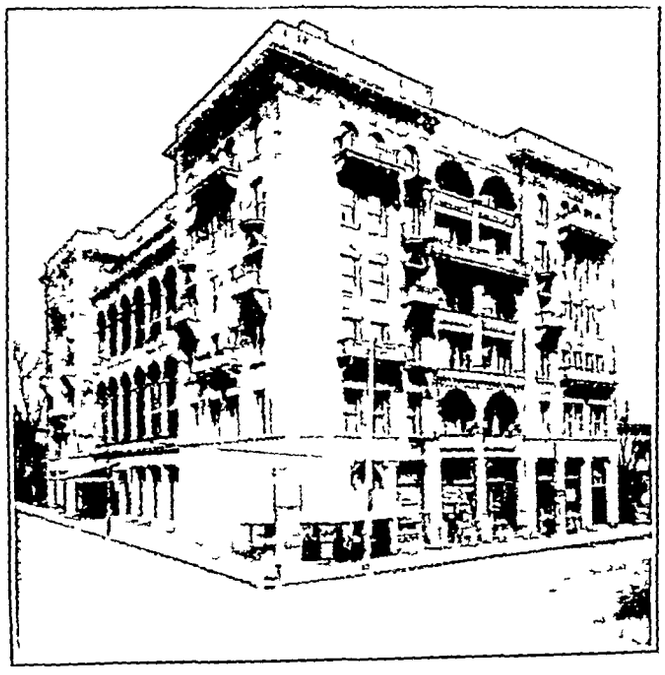
The healthfulness of its climate is so great that Minnesota has long been regarded as a sanatorium, particularly by those whose lives are threatened by phthisis A generation ago, before the advantages of California, Arizona, New Mexico and Colorado were known or, at least available thousands of consumptives came to Minnesota and many of them are still alive to testify to the beneficence of the climate It is a wonderfully healthy place There are absolutely no endemic diseases Malaria is unknown, and when epidemics like la grippe invade this territory they assume a milder form than that known elsewhere There is not on the globe a healthier place of its size than St Paul, with a death-rate in 1900 of but 9 63, calculated on the census population Its situation makes perfect drainage easy, and it is almost the only considerable city in the west whose water and ice may be used by strangers with absolute safety Water and ice are taken from inland lakes whose shores are free from settlement, making pollution by drainage impossible Consequently typhoid is but little prevalent, and it would be almost unknown were it not for imported cases and for the fact that those living on the outskirts of the city still drink from wells At the present time of writing, for instance, there is not a single case of typhoid in the two hundred and twenty-five beds of the City Hospital

TRANSPORTATION

Of the ten railroads running into St Paul, seven come from the east one of them, the "Soo Line," running trains to Boston and New York by way of Montreal, the other six are Chicago lines, namely, the Chicago, Milwaukee & St Paul, the Northwestern, the Chicago, Burlington & Quincy, the Wisconsin Central, the Minneapolis & St Louis (part of the Rock Island system), and the Chicago Great Western From the west comes the Great Northern and the Northern Pacific railways, together with the western division of the "Soo," which, by its connection with the Canadian Pacific, reaches the west coast The Pacific may also be reached by way of the Chicago, St Paul Minneapolis & Omaha Railway connecting with the Union Pacific Duluth at the head of navigation on the Great Lakes is connected with St Paul by branches of the Great Northern and Omaha roads and by the Northern Pacific During the open season for navigation there are always two or three steamboats a week carry-

ing passengers on the river between St Paul and St Louis

Arrangements have been made with the roads running into St Paul by which those attending the meeting of the Association will be carried at reduced rates The roads belonging to the Western Passenger Association will sell round-trip tickets to St Paul for the fare one way plus two dollars These tickets will be on sale on May 27, 28, 29 and 31 and June 1, 2 and 3 In a general way the roads embraced by the Western Passenger Association extend south to St Louis and Denver, west to Salt Lake City, north to Duluth and West Superior, and east to Chicago Special rates have been made from Butte and Helena of $30 00 for the round trip, from Spokane $40 00, from Seattle, Tacoma, and Portland, Ore, $50 00, and from San Francisco $67 50 Railroads outside the Western Passenger Association will sell round trip tickets to St Paul from May 27 to June 3 for one fare and one-third, on the certificate plan under the following rules



COLONNADE HOTEL

1 A first class one way ticket, together with a certificate properly filled out and signed by the ticket seller, must be procured at the starting point

2 The certificate must be presented during the meeting to Dr J A Quinn, to be countersigned by him and by the joint agent of the railroads at St Paul

3 On presenting the certificate, duly countersigned, to the ticket seller, a ticket for the return trip may be purchased at one third the regular fare

The reduced rates will be good for thirty days after the close of the meeting of the association, this limit may be extended to sixty days by the payment of a fee of fifty cents It has also been arranged that those who pass through Chicago on the return trip may buy through tickets in St Paul, and so save themselves any trouble about the exhibition of their certificate in Chicago

ACCOMMODATIONS

The visitor arriving in St Paul finds this great advantage, that all railroads, with one exception, arrive and depart at a single station, the Union Depot The exception is the Minneapolis & St Louis or Rock Island, line Moreover, not only is the station close to the heart of the city, but it is so situated that on coming out of its doors the traveler is at no loss which way to turn, since there is but one direction in which he can go A walk of one block brings him to a street car track over which run the Union Depot cars, passing in succession the Ryan, the Clarendon and Astoria hotels Continuing on another block the visitor comes to the Sherman House on the corner of Fourth street, on which run the cars of the Selby Avenue Line, carrying him to the Windsor, the Metropolitan and the Aberdeen hotels

ABERDEEN HOTEL

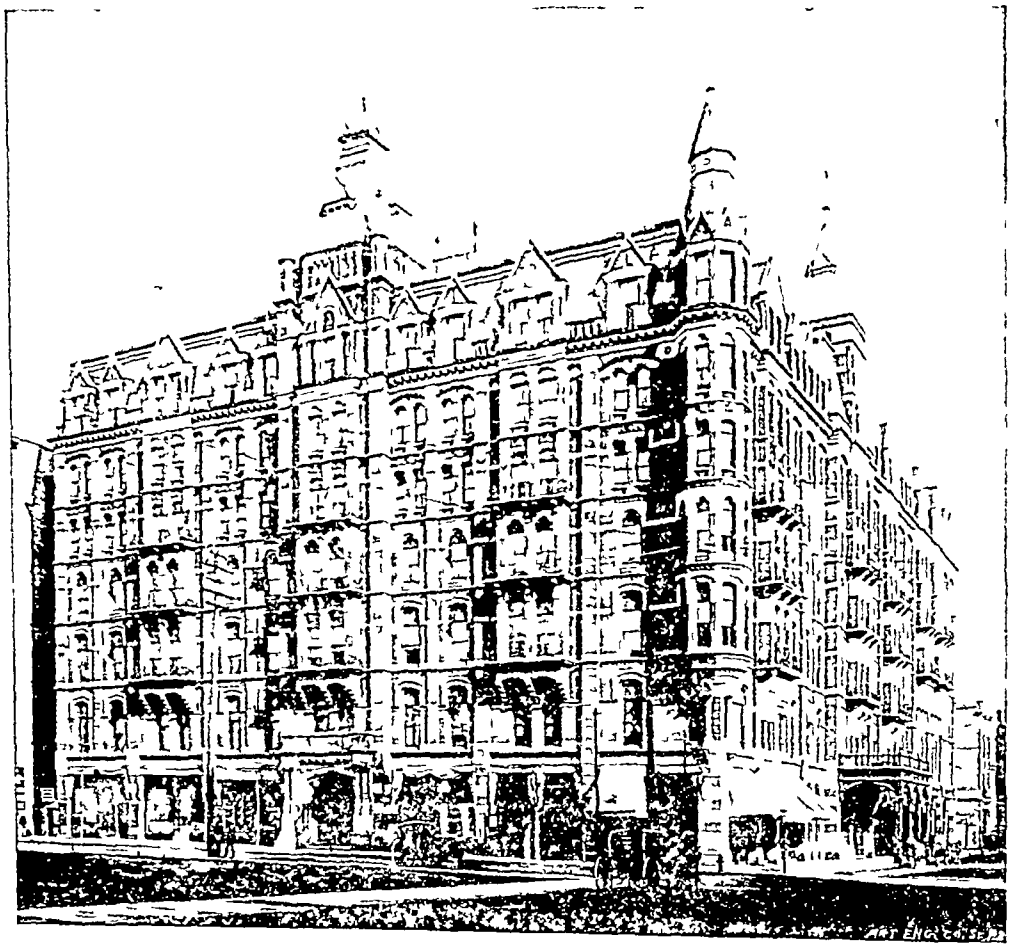
A list of hotels, giving their capacity and rates, will be found below Further accommodations may be had in Minneapolis, distant but an hour's ride by electric cars running at short intervals over two lines

	Capacity	Rates
Aberdeen	450	$4 00 7 00
Ryan	800	3 00 6 00
Merchants	400	3 00 5 00
Windsor	400	3 00 5 00
Metropolitan (American plan)	350	2 50 4 00
Metropolitan (European plan)		1 50 3 00
Clarendon	200	1 50 3 00
Sherman	150	1 00 2 50
Astoria	175	1 00 2 50
Colonnade	100	1 00 3 00
West (Minneapolis)	600	3 00 6 00
Nicollet (Minneapolis)	400	3 00 5 00
Allen (Minneapolis)	250	2 00 4 00

Many rooms have been secured in private houses to be used in case the hotel accommodations should prove insufficient Visitors will find at the Union Depot and at each hotel members of the local committee on accommodations provided with lists of desirable rooms that may be secured by means of a special corps of messengers

MEETING PLACES

Although St Paul is a much spread out city covering some fifty-five square miles of ground the meeting places of the Association and its sections as well as most of the hotels lie within an area comprising but a few blocks The headquarters of the meeting will be at the Hotel Ryan which, with its annex occupies the block on Robert streets betwen Sixth and Seventh streets



RYAN HOTEL

On the fifth floor of the Annex will be found the Bureau of Registration and the exhibits Half a block from the Ryan Hotel, on Sixth street, is the Metropolitan Opera House, where the general sessions will be held The theater has excellent acoustic properties and a seating capacity of 2,500

The meeting places of the sections will be as follows In the old State Capitol Building, on Wabasha street, between Exchange and Tenth streets, reached by the Interurban electric cars which start from in front of the Ryan Hotel every five minutes, will meet three Sections, namely Practice of Medicine, in the House of Representatives, Materia Medica, Pharmacy and Therapeutics in the Senate Chamber, Mental and Nervous Diseases in the Committee Room

In the Masonic Temple Lowry Arcade Building, St Peter street between Fourth and Fifth streets, entrance on Fifth street will meet the Section on Surgery and Anatomy in the large Masonic Hall, Obstetrics and Diseases of Women in the small Masonic Hall, Hygiene and Sanitary Science in the Masonic Armory, Cutaneous Medicine and Surgery in the Masonic Banquet Hall

The address on Pathology by Dr Flexnor on Wednesday, at 7 p m, will also be delivered in the Masonic Temple This building is three blocks west and one block south of the Ryan Hotel

In the Elk's quarters also in the Lowry Arcade Building entrance on Fourth street, will meet the Section on Ophthalmology in the Elk's Hall, Laryngology and Otology in the Elk's dining room

In the Ryan Annex will meet the Sections on Diseases of Children, Physiology and Dietetics, Pathology and Bacteriology

The Section on Stomatology will meet in the Ryan Hotel

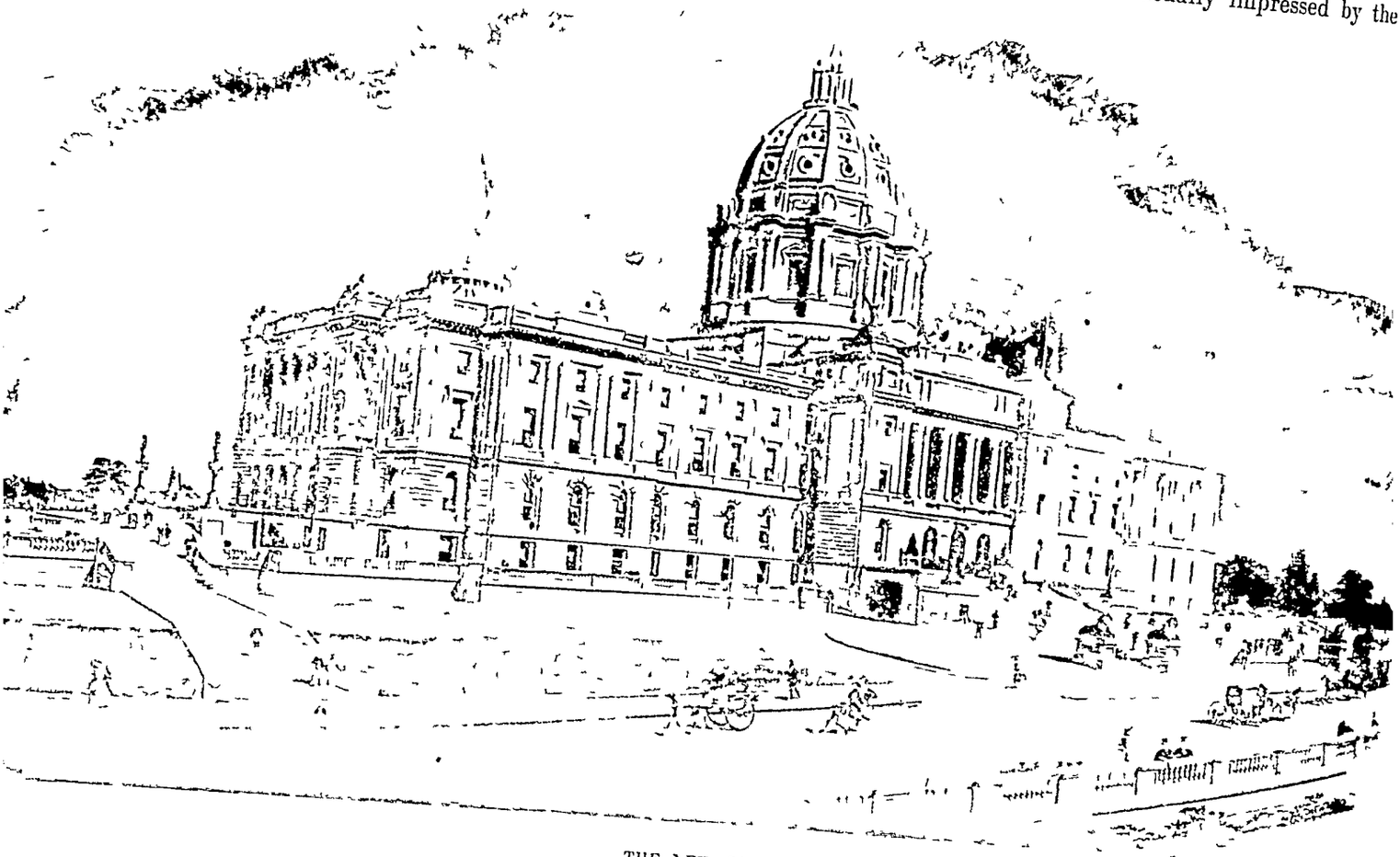
THE CITY

Buildings that are interesting on account of their age will be looked for in vain in a place where the first house was built but sixty years ago It is to its newer buildings that St Paul points with special pride Fore-

most among these are the new state capitol, to the exterior of which the finishing touches are just being put Built of white marble, upon the high land back of the center of the city, it is a conspicuous object for miles around a prominence that is fully justified by the beauty of its proportions, the grace of its outlines, and the delicacy and appropriateness of its ornamentation It is easily in the front rank of handsome buildings in this century, and a visit to it will be well repaid by the opportunity to study a rare work of art The Interurban cars run within two blocks of the capitol grounds Another prominent building is the new government building, built of Minnesota granite, occupying the square bounded by Market, Washington, Fifth and Sixth streets and containing, besides the post-office, the customs and internal revenue offices and the

what is known as St Anthony Hill, really not a hill at all, but a natural level of the prairie, with the business portion of the town lying in the valley below, between it and the river Here are a number of square miles of attractive houses, on clean, well shaded streets, Summit Avenue, running along the bluff, being justly famed throughout the country for its fine places The opportunity is seldom offered to build a house upon a broad and beautiful street and with such a view as that from the windows of the Summit Avenue houses overlooking the river valley The avenue is easily reached by the Fourth Street electric line, whose cars cross it Upon one or two of the salient points of the street lookouts have been established, from which extensive views may be had

The visitor to St Paul is usually impressed by the



THE NEW CAPITOL

Federal courts The combined Court House and City Hall, occupying the block bounded by Fourth, Fifth Wabasha and Cedar streets, is a striking building built of a Minnesota stone Conspicuous among structures devoted to hotel purposes are the buildings of the Ryan and Aberdeen hotels The wholesale district contains many fine blocks of mercantile houses, while among railroad buildings the offices of the Great Northern and Northern Pacific railroads are massive and extensive

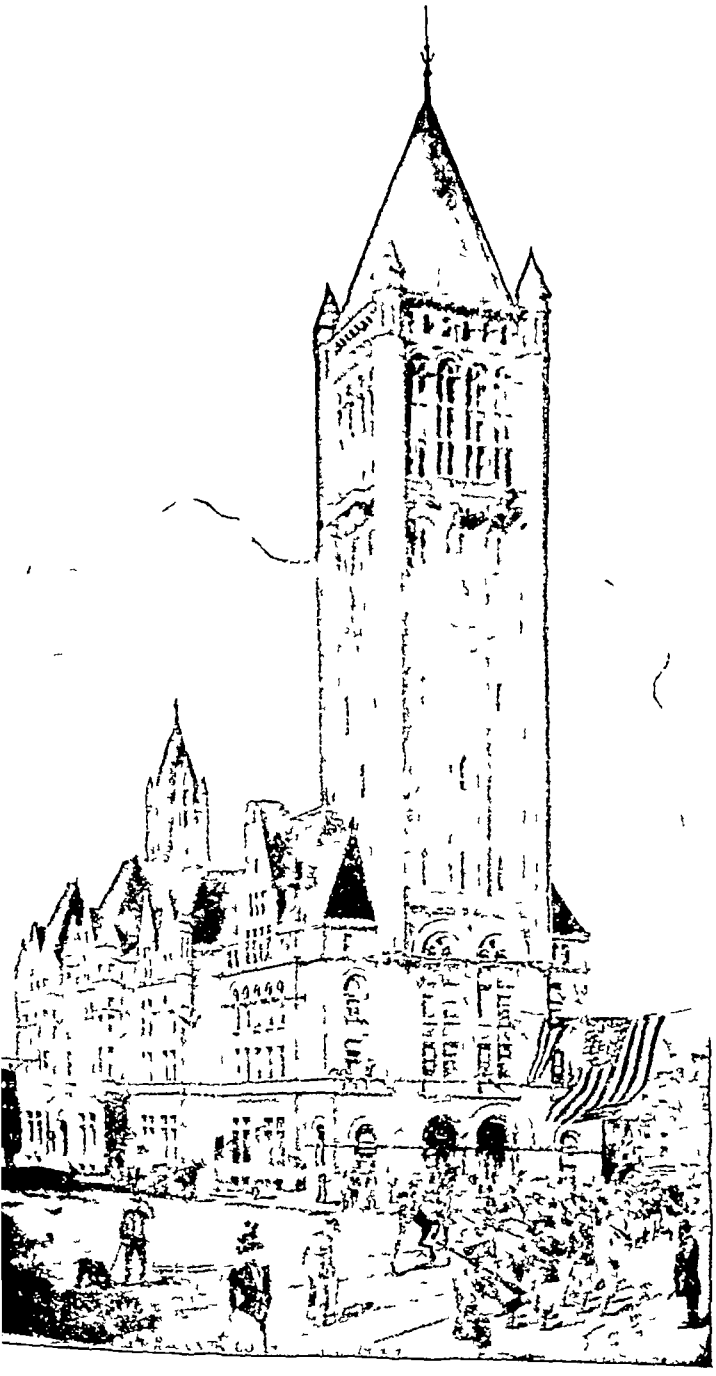
The business of St Paul is largely derived from its position as a railroad, financial and distributive center, but it has many large manufacturing concerns which put out a great variety of articles

An unusually pleasing feature of the city is its residences, of which the more pretentious are grouped on

number and variety of its bridges, which are more than usually picturesque because of a considerable difference in the height of the banks upon the two sides of the river so that the three wagon bridges opposite the town are all sloping, and, moreover, do not all slope the same way

The high bridge, so called, that farthest up the river is remarkable for its length, a full half mile, and its height above the river, which in one span is a clear two hundred feet At Fort Snelling five miles above the city, is another very high bridge spanning the Mississippi and giving a most picturesque outlook The Marshall Avenue bridge, a few miles above the fort, is a most graceful structure, an embellishment of the beautiful river scenery at this point

There are within the limits of the city many small squares devoted to park purposes, while in the outskirts are several larger pieces of ground of which the Indian Mounds and Como Park deserve special mention The Indian Mounds are reached in a twenty-minute ride in the Maria Avenue line of electric cars which may be



NEW POST OFFICE

taken on Fifth street, one block south of the Ryan Hotel As its name suggests, the site of the park was chosen by the aborigines for the location of a number of their curious mounds, the spot chosen being one of the highest and boldest points in the neighborhood, at an angle of the cliffs overhanging the Mississippi, and commanding a most extensive view A pathway from the mounds leads down to the fish hatchery, where much that is curious and interesting may be found

Como, the largest of the city parks, covers some 396 acres, of which a considerable part is occupied by a picturesque lake It is reached by the Como-Interurban electric cars, starting in front of the Ryan Hotel, and offers to the visitor a great variety of interest in the way of beautiful flowers and plants, shady walks and sparkling waters A pretty and not over long drive takes one from the city past the new capitol, out Como avenue through the park, a drive that may be pleasantly extended from the park on past the state fair grounds and the buildings and grounds of the state agricultural college

FORT SNELLING AND MINNEHAHA

History and poetry are at once suggested by the names of the old fort and the picturesque falls that Longfellow has immortalized The fort is reached by the Fort Snelling line of electric cars, running west on Seventh street, which may be taken at the corner of the Ryan Annex, with a caution to be sure and get on the car running in the right direction

The line ends at the river bank opposite the fort, but the view from the bridge is so fine as to well repay the trouble of crossing A picturesque old blockhouse is almost the first object encountered on reaching Fort Snelling The government reservation is a large one, and the officers' quarters are now in comparatively new buildings half a mile from the bridge The part next the bridge the "lower post," as it is called, is most interesting from the historical standpoint, for here was built the original outpost in 1820, upon what was then so remote a part of the frontier that the first steamboat did not come up the river until three years later

To reach Minnehaha by electric car it is necessary to take the Interurban line to Minneapolis and there, on the outskirts of the city transfer to a Minnehaha car making a ride of about an hour and a quarter Besides the waterfall there is a very pretty little park about the picturesque stream, and adjoining are the buildings and grounds of the Minnesota Soldiers' Home

A most delightful drive is out Summit avenue four miles to the river, then over Cleveland avenue to Fort Snelling, through the fort, and on two miles to Minnehaha from which point the return may be made the same way, or the drive may be continued on by way of Minnehaha avenue to Lake street, across the picturesque Marshall avenue bridge, past the buildings and golf links of the Town and Country Club, and back to town over Marshall avenue

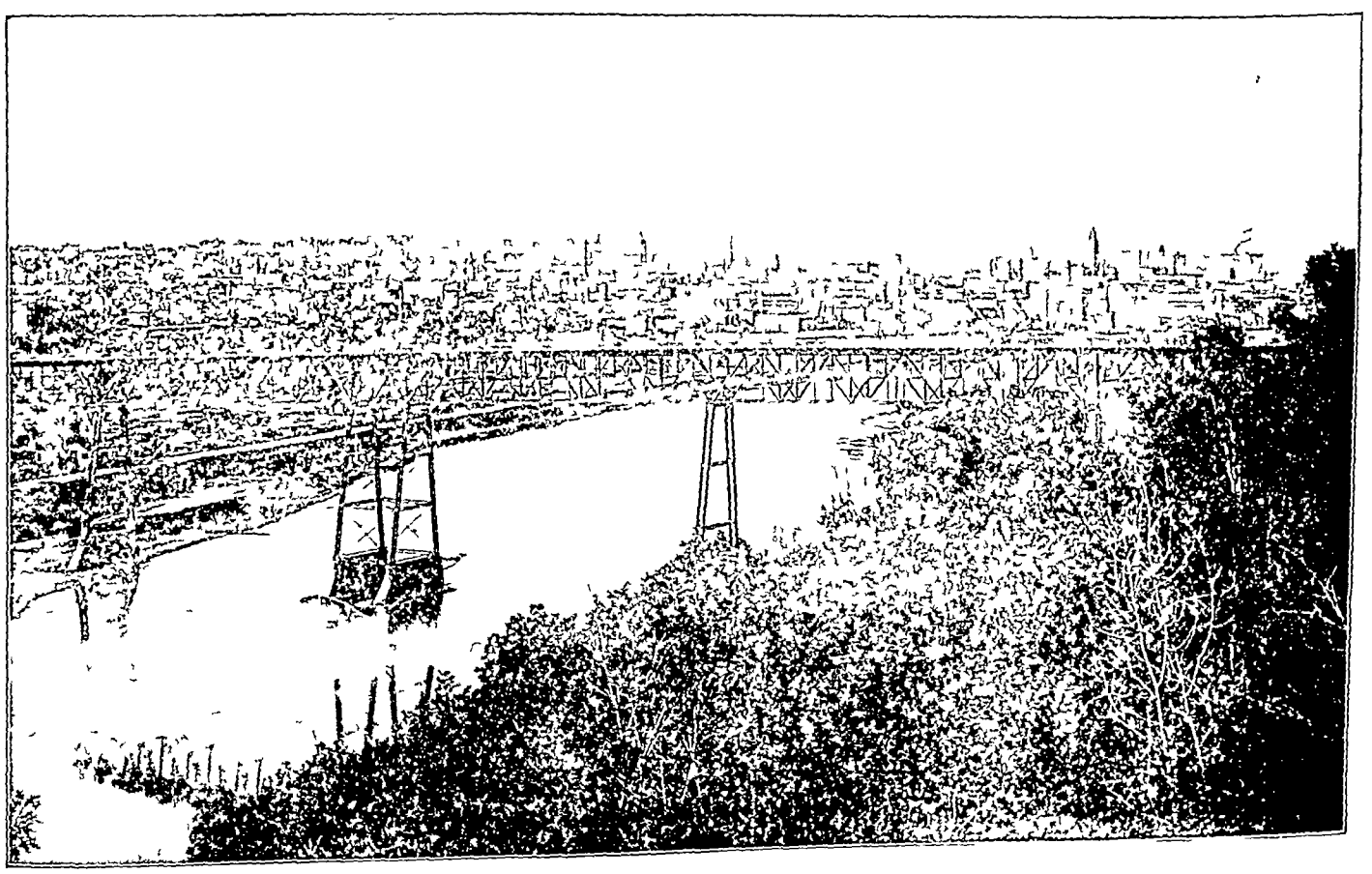
TROLLEY RIDES

A ride in an open electric car on a pleasant summer day is no mean substitute for a carriage drive, and it has the great advantage that it allows the sightseer to cover much ground in a short time One of the finest trips of this kind may be had by taking a Como-Interurban electric car, starting in front of the Ryan, and passing in succession the new capitol, Como Park, the state fair grounds, the state agricultural college, through Minneapolis and on by Lake Calhoun to Lake Harriet, the end of the route, a ride of fifteen miles This ride gives a very good glimpse of Minneapolis,

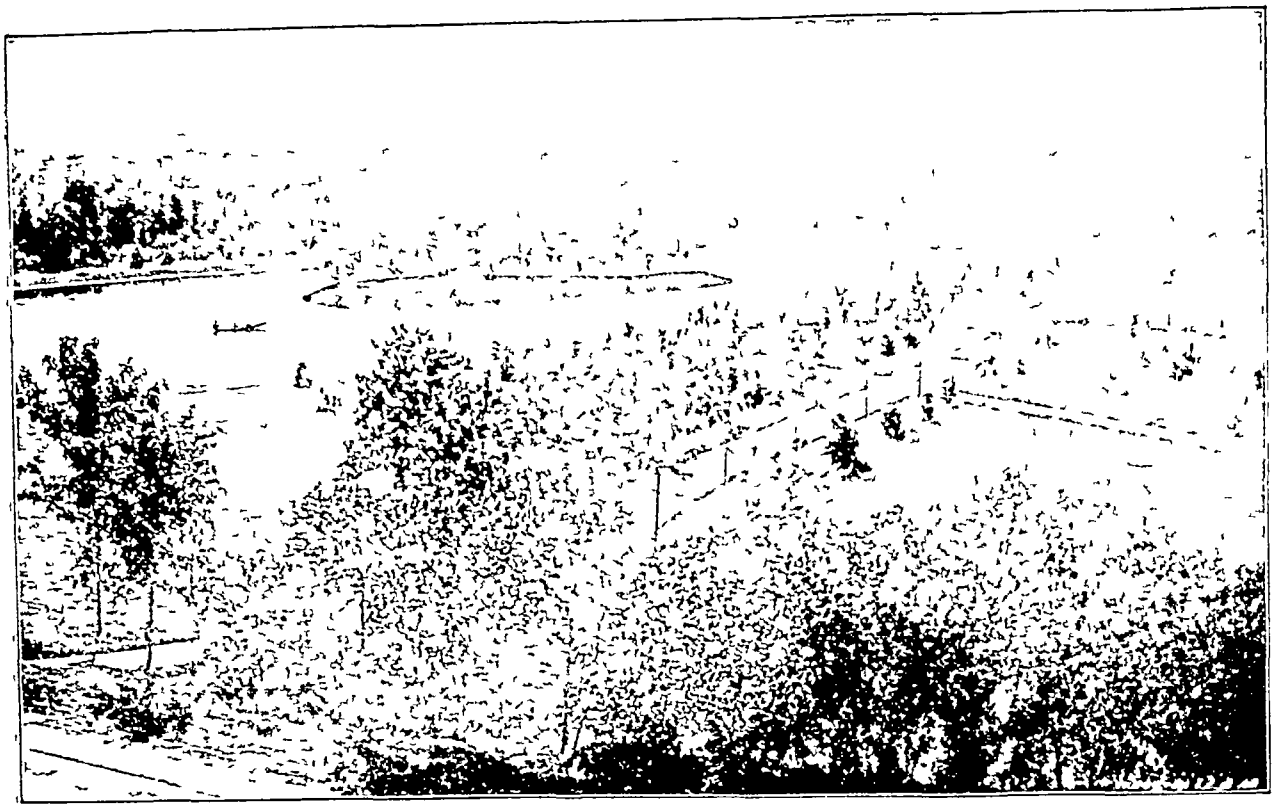
View on Summit Avenue, St Paul

crossing the river just above the Falls of St Anthony, giving a sight of the extensive lumber and flour mills for which that city is famous, and after passing the business district, taking the visitor by some of the parks and fine residences

Another trolley ride is on the swift cars that run to Stillwater, crossing Robert street at Fifth, one block from the Ryan, and leaving every half hour The ride is through a beautifully wooded farming country and after touching at Wildwood, on White Bear Lake, it takes the visitor to the high bluffs of Stillwater, from which may be had a fine view of the valley of the St



The "High Bridge" and Birds-eye View of St Paul

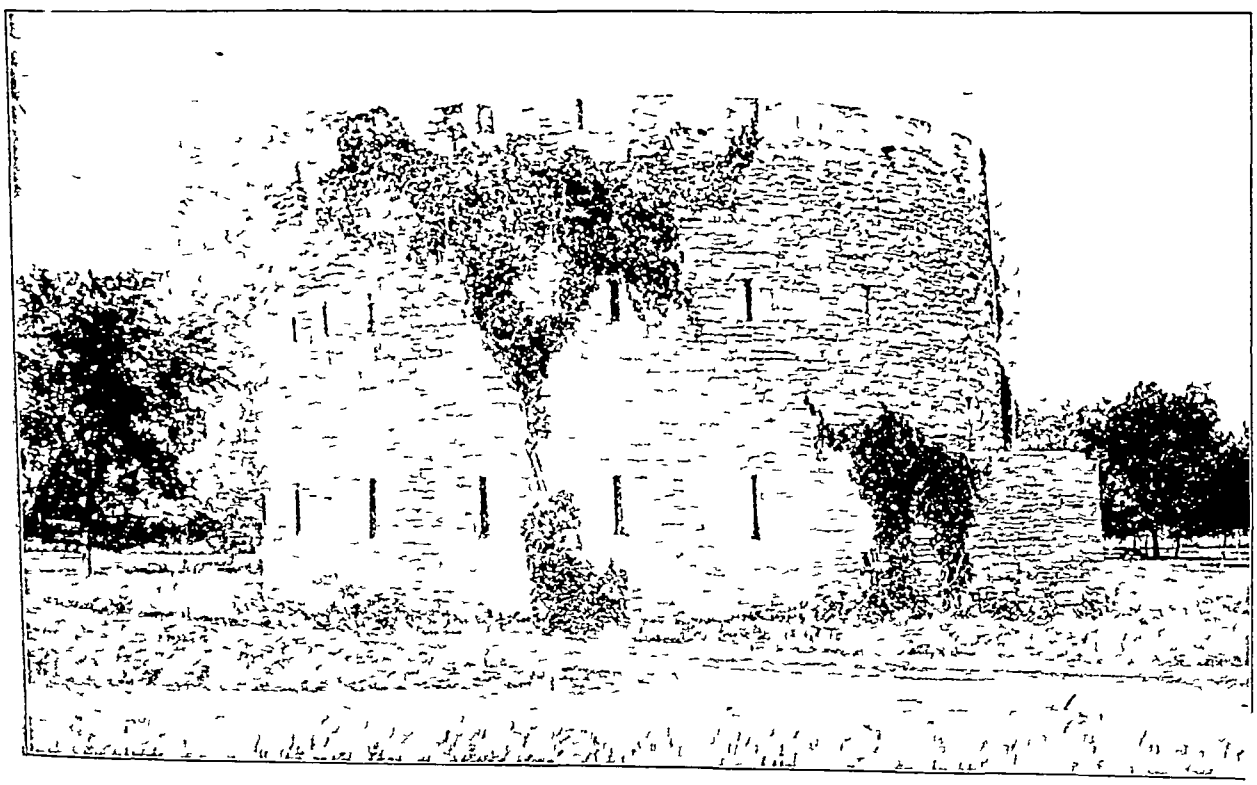


Cozy Lake, Como Park, St Paul

Croix The Minnesota State Prison is situated here and a visit to it will repay those who are interested in seeing a model penal institution

THE YELLOWSTONE PARK

Arrangements have been made for a trip to this delightful region, to accommodate those who come to the meeting The Northern Pacific Railroad announces that it is intended to have a special train leave St Paul on the evening of June 7, shortly after the adjournment of the meeting, arriving at Cinnabar Mont, about 10



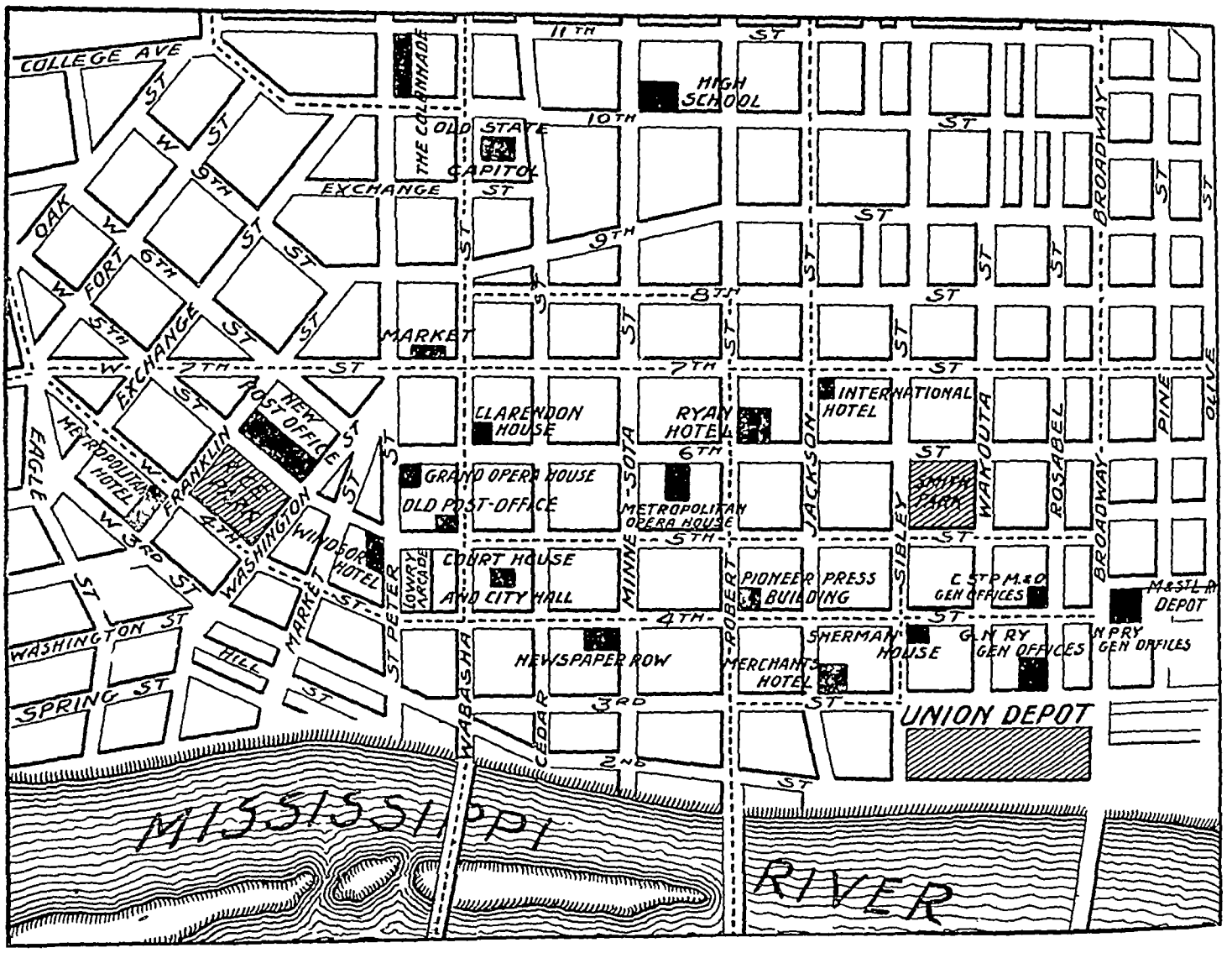
The Round Tower, Fort Snelling

Erected as a Guard house subsequently Loop holes were pierced for Musketry

a m on the 9th which will enable the Park Transportation Company to reach Mammoth Hot Springs Hotel with their guests not later than 12 o'clock (noon), in time for luncheon The regular tour of the Park will begin the following morning

The train will be composed of a baggage-car, dining-car, and Pullman first-class sleeping-cars

stage fares, meals on dining-cars and meals and lodging at the Park hotels, for the Park tour, which will occupy five and one-half days in the Park itself If the road over the Continental Divide between the Upper Geyser Basin and the Lake Hotel is not passable at this earlier date an extra day's time will be allowed at the Grand Canyon of the Yellowstone



The condition upon which this train will run is that at least 100 tickets be sold for the round trip to and through the Park, at the price of $85 per ticket This rate is an unusually low one, and the special train can be justified only upon the sale of the number of tickets specified This special ticket will include railroad fares,

Tickets for this occasion will be on sale only at St Paul and on June 7, good for use from St Paul on that day, but not later

For reservations call on or address any Northern Pacific Railway General or District Agent, or write to Chas E Fee, General Passenger Agent, St Paul, Minn

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Original Articles

MOVABLE KIDNEY—ITS CAUSE AND TREATMENT

M L HARRIS MD
PROFESSOR OF SURGERY CHICAGO POLYCLINIC
CHICAGO

The kidneys are usually classed as fixed organs They however, are not fixed but possess normally quite a range of motion This varies from 2 to 4 cms in a longitudinal direction and corresponds to the rise and fall of the diaphragm during respiration As a rule the normal kidney can not be palpated through the intact body walls in men but in women the right can be distinctly felt in a majority of the cases and the left in a smaller proportion A kidney may often be easily palpated by one with much practice when another with less experience would fail to perceive it

In palpating a kidney the patient, with all clothing about the body removed should lie on the side opposite the organ sought with the head and shoulders slightly higher than the hips and the thighs gently flexed Standing at the back of the patient the fingers of one hand are firmly pressed against the abdominal wall just below the costal arch and to the outer side of the rectus muscle while, with the fingers of the opposite hand, firm counter-pressure is made against the small triangular space just below the 12th rib behind The patient should take a deep breath during the somewhat rapid exhalation of which the kidney, if palpable, may be grasped between the two hands This lateral position has been found preferable as a rule to the standing position for the reason that many patients even with the body bent forward and the weight resting on a table are unable to relax the abdominal muscles as completely as when lying on the side It is often possible to palpate a kidney in the lateral position which could not be felt with the patient lying on the back

For the sake of clearness, it is necessary to define what is meant by a palpable and movable kidney In almost every individual not possessed of more than the average amount of subcutaneous fat the kidney may be felt in the sense that, with one hand firmly pressed in the triangular space below the 12th rib behind while deep pressure with the other hand is made in front and the patient takes a deep breath, an indistinct mass will be felt to impinge against and recede from the hand placed posteriorly Such a kidney, however, is not said to be palpable Only when a portion of the kidney can be distinctly grasped and outlined between the two hands is it said to be palpable One-third, one-half or two-thirds of the kidney may thus be palpated In case more than one-half the organ can be outlined and it can be caused to recede out of reach during exhalation, it is said to be movable to the first degree In case both hands can be brought together above the organ, it is movable to the second degree and if it can be depressed to the pelvic brim or moved to or beyond the midline, it is movable to the third degree

This classification is of course arbitrary but of value in facilitating clearness of description The great frequency of movable kidney in women has only recently been realized owing to a more systematic examination of patients with this point in view Kuster[1] found that 1 11 per cent of the women in his general surgical practice had movable kidneys, while Edebohls in an exclusively gynecologic practice estimates that 20 per cent are thus afflicted As will be seen from the subjoined table, both of these figures are very much too low, as my figures show that 56 per cent of the women had distinctly movable kidneys on one or both sides What are the causes of this large percentage of movable kidneys in women? The etiologic factors usually mentioned are the following 1 Repeated pregnancies which are supposed to act by producing a relaxation of the anterior abdominal walls, thus diminishing the abdominal pressure against the kidneys, as well as by the enlarged uterus directly displacing these organs 2 Prolapse of the uterus and vagina with lacerations of the perineum by contributing to the reduction of intra-abdominal tension 3 Retrodisplacements of the uterus by drawing on the ureters 4 The rapid absorption of the perirenal fat as may occur in acute wasting diseases 5 Drawing on the kidneys by the transverse mesocolon in enteroptosis of Glenard's disease 6 The relaxation of the abdominal walls which follows the removal of intra-abdominal tumors or ascitic accumulations

That these factors have very little or no influence in giving rise to movable kidneys will be clearly shown

The fallacy of supposing that pregnancy, lacerations of the perineum, displacements of the uterus etc, are instrumental in causing movable kidneys is unanswerably shown by the fact that over 40 per cent of the cases of movable kidneys were found in unmarried women, in women who have thus never been pregnant, who have intact perineal floors and whose uteri are in normal position That these factors may, and perhaps, at times do, aggravate the condition caused by other influences is admitted

The fallacy of the theory of the absorption of the perirenal fat has been shown by Heller, and of the traction theory by Ewald The influence of traumata both internal and external will be considered later What then is the fundamental cause of movable kidney? This is found in the relation which exists between the location of the kidney and the body form

The exhaustive work of Wolkow and Delitzin renders it unnecessary to enter into a study of the location of

* Read at the annual meeting of the American Surgical Association held at Baltimore Md May 7 9 1901

1 Deutsch Chir Lief B III

the kidney as found in the dead-house Conclusions, however, based entirely on dead-house findings are erroneous for the reasons that when the body is in the recumbent position the kidney assumes its highest or most cephalad location, that this location is moved still further cephalad by the final contraction of the chest at death and last because the kidney loses much of its mobility owing to the postmortem solidification of the perirenal fat

These studies are therefore, based upon observations made on the living subject in the examining room and on the operating table While systematically examining patients in Litten's clinic Becker and Lenhoff[2] became convinced that they were able to predict from the general appearance of the body form of a woman whether the kidneys would be found palpable or not In order to reduce this conviction to some tangible shape a series of measurements of the women examined was made which eventuated in what they termed the index of the body form This index was obtained by dividing the distance from the suprasternal notch to the upper edge of the symphysis pubis by the least circumference of the abdomen and multiplying it by 100 They found that in women with high index the kidney was usually palpable, while in those with low index it was not palpable The average index was 77

They therefore divided the patients into positive or those with an index above 77, in whom the kidney could be felt, and negative or those whose index was below 75, and whose kidneys could not be felt Before the appearance of Becker and Lenhoff's article I had made some observations on the body form in its relation to the kidney which were inspired by Kuster's article in 1895, on the cause of subcutaneous lactrations of the kidney and of movable kidney[3] Kuster's observations I was able to confirm many times during my courses on operative surgery on the cadaver as well as by observations on the living subject I then began a more systematic study of movable kidneys and the location of the kidney in its relations to the body form or rather the influence of the body form on the location of the kidney

In this study certain measurements of the body were taken together with certain other data, which were supposed might have a bearing on the subject It was soon found that the measurements taken by Becker and Lenhoff, namely the jugulo-symphysis and the least abdominal circumference, were not sufficient to give one a correct idea of the body form nor did these measurements offer, in any way, an explanation of the fact that in certain cases the kidney would be found palpable while in other cases it could not be felt Numerous exceptions to their rule, as shown by themselves, also indicated that there were other factors which should be taken into consideration In order to determine what those other factors were additional measurements of the body were taken, together with the following data Sex, age, married or single, number of children, weight, height, condition of the 10th rib, accidents such as severe falls or injuries to the body and the condition of the pelvic organs and perineum

For the purposes of this study the body cavity may be subdivided into three portions or zones the upper of which contain chiefly the lungs and heart, the middle zone the liver, stomach, spleen pancreas, and major portion of each kidney, while the lower zone contains the intestinal canal and a minor portion of each kidney The true pelvis may be disregarded A transverse plane passing through the body at the lower end of the sternum proper, not the xiphoid appendix, forms the lower boundary of the upper zone, and a similar plane which cuts the lowermost point of the 10th ribs, forms the lower boundary of the middle zone While the plane forming the boundary between the upper and middle zones does not of course, accurately separate the chest from the abdomen, it may be taken as such for practical purposes and has been found to be of great importance in determining the body form and in estimating the capacity of the middle zone, as will be shown in the table of measurements

After measuring the least abdominal circumference in a number of individuals it was found that this plane was not fixed in regard to its location, thus, in women while it usually cuts the 10th ribs it often passed below this point and occasionally was as high as the 9th rib, in children it usually passes entirely below the ribs, often as much as 1 cm, and in men it usually passes just below the tips of the 11th and 12th ribs It, therefore soon became evident that this measurement should be taken at some fixed point in order to obtain reliable comparative results As the middle zone includes that portion of the body cavity which is partially enclosed by the lower ribs, its lower boundary should correspond with the lowest point of these ribs The 10th rib is the one which forms the lowest point laterally and in measuring the circumference of the body at this point, the tape should always rest on the lower edge of the 10th rib at its lowest part, instead of measuring the least abdominal circumference without regard to its location

In taking these measurements the patient should lie flat on the back If the shoulders are raised any it is very easy to shorten the jugulo-symphysis distance 1 to 3 cms owing to the forward curve of the body The circumference of the body at the 10th rib is first taken and the point where this line crosses the midline is marked with a pencil The lower end of the sternum or apex of the costal arch is marked and the circumference of the body at this point measured The breasts should be drawn upward so as not to include the lower part of them in the measurements Both of these measurements should be taken at the end of expiration during ordinary respiration The jugulo-symphysis is the distance from the upper end of the sternum or suprasternal arch to the upper border of the symphysis pubis In taking this measurement the length of each zone upper middle and lower should also be separately recorded By dividing the jugulo-symphysis by the circumference at the 10th rib an "index" was obtained which in the table is marked "Index No 1"

In measuring the circumference in the manner just mentioned several sources of error were observed which vitiated somewhat the results and occasionally made them appear contradictory Thus it was found in measuring the abdominal circumference that the deposit of fat which rounds out the female form above the hips was occasionally so great that the circumference was increased out of proportion to the inner capacity The same effect was produced by the muscles of the loin in some women in whom marked constriction of the lower ribs is present The measure is increased if taken when the stomach is full or distended

In women with a lax or pendulous abdomen with visceral ptosis the lower ribs spread considerably when the patient is lying down and the circumference is thus

2 Deutsch Med Woch 1898 xxiv S 508
3 Arch f Klin Chir, 1895 No 50 S 676

increased from 2 to 5 cms over the same when standing In a well-built person with firm muscles the circumference when lying differs little or not at all from the same when standing In case the breasts are quite large, even when drawn up as much as possible, the circumference of the body at the lower end of the sternum is increased out of proportion to the inner capacity

As the object of the measurements is to form therefrom an idea of the relative capacity of the middle zone of the body, it may be readily seen that in the cases just mentioned an erroneous conclusion may be drawn Some method of measuring was therefore sought which would eliminate these errors This was found in the use of a graduated calipers By means of the calipers certain diameters of the body could be measured opposite fixed points which are less influenced by varying amounts of adipose tissue and other conditions of the body The measurements taken with the calipers are five in number namely

No 1 Lateral diameter of the body on a plane corresponding with the lower end of the sternum This plane at its widest lateral diameter usually cuts the 7th rib and the ends of the calipers are therefore pressed against these ribs and the widest diameter recorded This measurement is called the upper lateral diameter

No 2 Is the middle lateral diameter and is the greatest distance between the lower edge of the 10th ribs Care should be taken to place the ends of the calipers against the lower portion of the 10th ribs and avoid the muscular folds often present in this region

No 3 The lower lateral diameter is the widest distance between the crests of the ilia

No 4 The upper antero-posterior diameter extends from the lower end of the sternum to the spinous process directly opposite and in the same plane as the upper lateral diameter

No 5 The middle antero-posterior diameter extends from the midline in front to the spinous process opposite and in the same plane as the middle lateral diameter

These measurements should be taken with the patient standing

The cases in which these last measurements were taken in women are placed by themselves and labeled "Second Series" These five measurements present a formula which may be said to represent each a particular body form By dividing the middle lateral diameter by the upper lateral and multiplying by 100 is obtained what is called "Index No 2" By a careful consideration of these tables it is found that many important and interesting conclusions may be deduced therefrom

As women are the most frequent sufferers from movable kidney they will be considered first The cases are arranged in order, based on "Index No 1," beginning with the lowest index and ascending to the highest In the "Second Series' the same order is maintained and next to "Index No 1" is placed "Index No 2 ' The indices are simply attempts to reduce to single figures the relations between certain of the body measurements, and thus represent at a glance the body form

"Index No 1" shows the relation which exists between the length of the body cavity and its circumference at the lower edge of the 10th rib, "Index No 2 refers entirely to the middle zone of the body and shows the relation which exists between the lateral diameter of the lower end of this zone and that of the upper end or, in other words the amount of constriction or diminution of the capacity of the lower end as compared with the upper

It will be observed that the column marked "Index No 1," is arranged in ascending order and that the location or condition of the kidneys, as noted in the proper columns, is found to be "negative" or not palpable until the index reaches 77 to 78 In those cases in which the index is above this point either one or both kidneys are found to be palpable or movable to a greater or less degree The exceptions to this rule will be noted later If all cases be divided into "negative" and "positive, there will be found among the women 55 negative and 71 positive

That all cases with a low index are uniformly negative and those with a high index uniformly positive can not be due to chance An explanation of this fact will be found in a study of the other measurements given in the table Weight is found to favor the negative cases, their average weight being 58 7 kgs, while that of the positives is 54 5 kgs In height the positives exceed the negatives by 2 1 cms, their average heights being respectively 160 1 cms, and 162 8 cms Of this increase in height one-half, or 1 2 cms, lies in the length of the body or jugulo-symphysis and the remainder in the extremities Average jugulo-symphysis 50 82 negative and 52 03 positive

The interesting point in this connection is the distribution of this 1 2 cms in the different zones of the body The average length of the different zones are, upper zone 14 55 cms for the negative and 14 58 cms for the positive middle zone 14 cms negative and 15 1 cms positive, lower zone 22 27 cms negative and 22 33 cms positive It will thus be seen that the lengths of the upper and lower zones remain about the same in the two classes of cases, while practically the entire increase in the length of the jugulo-symphysis in the positive cases over the negative is found to lie in the middle zone

If we now consider the average circumference of the middle zone at its upper and lower portion we find this to measure 77 1 cms for the upper and 69 5 cms for the lower in the negative cases and 73 46 cms for the upper and 61 9 cms for the lower in the positive cases This is a difference of 7 6 cms, or 9 8 per cent in the negatives and 11 56 cms or 15 7 per cent in the positives This shows that there is a marked increased contraction or diminution in size of the lower portion of the middle zone in the positive cases over that in the negative This will be still better shown when we consider the diameters taken with the calipers

If the middle zone were a true conic section with a greater and smaller circumference, as above given the middle zone in the positive cases would contain nearly 800 c cs, or 13 2 per cent, less than the same in the negative cases This would be equivalent to the space occupied by both kidneys and the spleen Of course, in this estimate no allowance has been made for the thickness of the body wall, nor for the marked difference between the configuration of this section of the body cavity and the external surface It simply demonstrates that there is a marked contraction of this space in the positive cases as compared with the negative As already pointed out, certain slight errors may occur in measuring circumferences which are practically eliminated by measuring the diameters with graduated calipers

If we consider now these diameters, we find that in the negative cases the average upper lateral diameter is 23 62 cms , average middle lateral diameter 20 2 cms , average lower lateral diameter 28 7 cms average

upper antero-posterior diameter 16 9 cms , average middle antero-posterior diameter 15 67 cms In the positive cases the average corresponding diameters are

Upper lateral	23 85 cms
Middle lateral	17 44 cms
Lower lateral	20 06 cms
Upper antero posterior	17 03 cms
Middle antero posterior	14 26 cms

The difference between the upper lateral and the middle lateral in the negatives is 3 42 cms , or 14 4 per cent , and the difference between the upper antero-posterior and middle antero-posterior is 1 23 cms or 7 28 per cent , while the difference between the upper and middle laterals in the positives is 6 41 cms , or 27 per cent , and between the upper and middle antero-posterior 3 04 cms , or 17 5 per cent This shows that the middle zone diminishes in size from above downward nearly 100 per cent more from side to side and 140 per cent more from before backward in the positive cases than it does in the negative

If we compare corresponding diameters in the two classes of cases, we find that the upper laterals are practically the same, while the positive middle lateral is 2 76 cms or 13 6 per cent , smaller than the negative In the upper antero-posterior there is a slight increase, 2 3 per cent in favor of the positive and in the middle antero-posterior a diminution of 1 41 cms , or 9 per cent , in favor of the positive If we figure the area of the lower end of the middle zone we find that it is 21 per cent smaller in the positive cases than it is in the negative This diminution in size is equivalent to displacing downward the contents of this space 2 6 cms at its lower end

It will thus be seen that these measurements, however figured, demonstrate beyond dispute that in those cases in which we find movable kidneys there is a marked diminution in the capacity of the middle zone in which the major portion of the kidney should lie, and that this diminution increases in ratio from above downward

As the chief and characteristic peculiarity of these cases lies in the marked difference in size between the upper and lower ends of the middle zone the ratio which one bears to the other may be used as an index to express the particular body form The ratio of the areas would be more correct However, as it requires considerable figuring to determine this, it has been found much simpler to use the ratio of the middle lateral diameter to that of the upper lateral It corresponds very closely to the ratio of the areas, and is determined by dividing the middle lateral by the upper lateral diameter and multiplying by 100 This constitutes what I have called "Index No 2," and is more reliable than "Index No 1" The average index No 2 for the negative cases is 85 26 and for the positive 73 23

In consulting the tables, we find that all cases with an index above 81 8 are negative and all below this number are positive We find in the table two cases, Nos 100 and 121, with the same index, namely 81.8, one ofwhich is positive and the other negative In looking at the antero-posterior diameters, however, we find a contraction of from 18 to 14, or 22 per cent , in the positive and only from 17 to 16, or 6 per cent in the negative, which explains the difference very nicely Had the areas been used instead of simply the lateral diameters the indices would not have been the same These two cases also illustrate the fact that while the index represents briefly, and in a general way the body form, it does not take into consideration all the points and is, therefore, not entirely reliable If all the measurements be considered, and particularly the five taken with the calipers, a formula will be obtained which represents accurately the body form

Case No 98 shows an error which may arise in measuring the circumference and relying on index No 1 In this case the deposit of fat above the hips was very marked and the circumference correspondingly large This gave a low index No 1, namely, 73 7 which should indicate a negative case The right kidney, however, was very easily found and freely movable to the second degree If we consider the diameters as taken by the calipers, which eliminate the error of fat, we find the middle zone contracted from 28 cms above to 20 below, a difference of nearly 28 per cent , and explains at once the cause of the movable kidney Other apparent exceptions are thus readily explained when all the measurements are taken into consideration

In what manner does a diminution of the capacity of the middle zone bring about a movable kidney? As already shown, the upper zone remains on the average practically the same in the two classes of cases Any lessening of the capacity of the middle zone must therefore, result in a displacement of the contents of this space downward The liver is affected first and as it is depressed its posterior border acts immediately upon the right kidney, tending to displace its superior pole forward or to depress the entire organ The presence of the liver explains the great predominance of involvement of the right kidney The left kidney is not only somewhat more firmly fixed, but has pressing upon it only the small spleen and the soft yielding stomach Although this depression of the kidney is always present as the principal determining cause, it is not the entire cause of movable kidney The kidney is so far depressed that the constricted and narrow outlet, as it may be called, of the middle zone is above the center of the organ, so that every movement or action of the body which tends to still further contract this outlet by adducting the lower ribs, produces pressure on the upper portion of the kidney and constantly tends to press it downward The amount or degree of mobility depends therefore not alone on the amount of constriction of the middle zone, but on the many conditions such as heavy lifting, hard work, straining, coughing, flexions of the body, etc , which act more or less continuously by pressing the organ downward

These various influences, which are quite numerous and so well understood that they need not be further detailed, may be summed up under the term "internal traumata" As they may vary considerably in different individuals they offer a ready explanation of the fact that different degrees of mobility may be present in individuals of practically the same body form

It may be well now to analyze our table of women as to the etiologic influence of other factors Measurements were made of 126 women No attempt was made to select these cases except excessively fleshy women in whom nothing within the abdomen can be distinguished were excluded They were examined as the occasion presented itself regardless of whether symptoms were complained of or not

Of the 126 women 71 or a little over 56 per cent , were found to have distinctly palpable or movable kidneys Of the 71 cases, in 35, or 50 per cent , the left kidney was also palpable or movable but seldom to the same degree as the right In only one case was the left alone movable, and in this case, although

the abdomen was very lax and easily palpable, no evidence of a right kidney could anywhere be felt Of the cases 81 were married and 13 single 2 not stated Of the 81 married women 41 or 50 per cent and of the 43 single women 28 or 65 per cent had movable kidneys Concerning the number of children born, the negative cases show that

6 had 0 children	0 children
4 had 1 child	4 children
3 had 2 children	6 children
3 had 3 children	9 children
3 had 4 children	12 children
4 had 5 children	20 children
1 had 8 children	8 children
1 had 11 children	11 children
25 women had	70 children

or an average of 2 8 children to each woman In 12 cases the number of children was not known Of the positive cases

6 had 0 children	0 children
2 had 1 child	2 children
10 had 2 children	20 children
4 had 3 children	12 children
4 had 4 children	16 children
2 had 6 children	12 children
1 had 7 children	7 children
1 had 10 children	10 children
30 women had	79 children

or an average of 2 6 children to each woman In 12 cases the number of children was not known

These facts point to the conclusion that child-bearing does not produce movable kidney and has no influence in that direction in the absence of that particular body form That repeated pregnancies, by producing relaxation of the abdominal walls and deterioration of the general health, may induce symptoms or aggravate those already present is very probable and will be admitted The same may be said concerning lacerations of the perineum and displacements of the uterus In three of the negative cases complete procidentia was present In one of the positive cases there was complete procidentia and in one prolapsus with rectocele and vesicocele

A most important question in this connection is the possibility of producing a movable kidney by external violence, such as a fall or a blow or injury in the region of the kidney The importance of this question from a medicolegal standpoint makes it necessary to enter into it somewhat in detail It is usually stated in textbooks, and it is a common belief, that movable kidneys are frequently the result of an injury This is but another of the numerous post hoc propter hoc errors An individual falls or meets with an accident in which the body is bruised or injured in some manner and an examination sometime thereafter reveals the presence of a movable kidney It is immediately concluded that the accident bears a causal relation to the movable kidney without stopping to consider whether the movable kidney may not have been present long before the accident and in no manner influenced thereby Several facts have contributed in giving origin to this belief

1 The fact may be mentioned that the large majority of physicians are still unfamiliar with the great frequency of movable kidney in women A physician of considerable experience recently stated it was a very rare condition and in all of his experience he had seen but four cases

2 In many cases movable kidney gives rise to no appreciable symptoms and in a large majority of those in whom distinct symptoms are undoubtedly due to the movable kidney the patients themselves are unaware of the cause of their symptoms and often, unfortunately, the attending physician as well

3 There is no means of determining how long a kidney has been movable

For the same reasons many writers on this subject have over-estimated the causal influence of trauma Most of the cases recorded as due to trauma will not stand criticism Sulzer[4] in regard to this relation, says "However, one will have to be very careful in judging of these relations for, on the one hand, we know from other diseases how readily people in general refer their troubles to a particular injury and on the other hand we shall see later that upon the occasion of a fall or exertion etc a movable kidney which is already present may suddenly present severe so-called strangulation symptoms and thus becomes first known to the patient or physician after it has existed without symptoms for months or years After considering the anatomic fact of the looseness of the peritoneum covering a movable kidney, he says "The acute origin of a movable kidney if it occur at all, is, then, only possible when owing to a congenital or acquired looseness of the peritoneum the disposition to the trouble already exists He further states "The question whether an acute traumatic origin of a movable kidney be possible may be very important in a medicolegal relation or in insurance business and I believe that without the acceptance of a particular abnormal body condition a movable kidney can never be the immediate result of a trauma" Sulzer arrived at these conclusions after a study of the cases in which a movable kidney was supposed to have resulted from an accident and owing to the fact that the peritoneum which covers the kidney in front and aids in holding it in place is very much relaxed in movable kidney and this relaxation or pouching is so great that it can not be produced suddenly any more than a large hernial sac can be produced suddenly Keller[5] is also of the opinion that this condition can not be produced suddenly but requires a considerable time for its development and, therefore a kidney with a distinct range of motion discovered immediately or soon after the receipt of an injury must have been movable before and its mobility can not thus have been caused by the injury

Concerning the traumatic origin of movable kidney, Budinger[6] says "When the kidney is fixed they (traumata) are able to produce only the first step while the formation of the typical movable kidney requires still other conditions A sudden marked dislocation presupposes an extensive loosening of the kidney, and not only that, but a space below the kidney with a considerable change in the relations of the peritoneum"

Guterbock (quoted by Budinger) concludes from a study of injuries to the kidney, "that a typical movable kidney does not occur as a result of trauma, but only a loosening of the organ which later may lead to mobilization unless the kidney becomes fixed by adhesions But even if one disregards the demand that a traumatic movable kidney must show relations analogous to the anatomic findings of the classical movable kidney, the number of such cases is very small in which in the living subject, a connection between the injury and the mobility with certainty can be demonstrated The pain

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5 Deutsch Chir Lief 67
6 Mittheil aus d Grenzgebiet 1898 9 No 4 S 267

Number	Females	Age	Married or single	No of childr'n	Weight	Height	Circumference at lower end of sternum	Circumference at lower edge of 10th rib	Jugulo sym physis	Length of up per zone	Length middle zone	Length of lower zone	Lateral diameter, upper	Lateral diameter, middle	Lateral diameter, lower	Anterior post diam, upper	Anterior post diam mid	Condition of 10th rib	Index No 1	Index No 2	Right kidney	Left kidney	Remarks
1	N McL	27	S		66	161		78	50 5	25	12	23 5						L	64 7		N	N	
2	Maude F	36	M	1	92 7	166	88	79	52	16	13	23						F	65 8			"	Abdominal wall quite lax
3	Emma S	35	"	5	73	156	83	76	51	14	13	24						"	67 1		"	"	Abd wall loose Lac cervix, u normal
4	Mary H	54	"	11	60 5	154	73	69	47	15	13 5	18 5						"	68		"	"	Abd very lax, tip of R K can be felt but not movable
5	J K	40	"	2	79	164	91	83	57	17 5	12	27 5						L	69		"	"	Operation for gall stones
6	K W	21	"	3	67	159		72 5	51	13 5	13	24 5							70		"	"	
7	Josie S	27	S		68	160	80	71	49	16	11	22							69		"	"	Lax abdomen, easily palpable
8	L V	31	M		59			70	49	14 5	12	22 5						L	70		"	"	Complete procidentia uteri
9	F D	25	"	0	55	157	76	68	49	13	15	21						F	72		"	"	Abdomen soft, palpable, muscles firm, great wheeler
10	D A	30	"	1	66	157		72	52	15	13	24						L	72		"	"	
11	H A M	42	"	0	73	160		73	53	15	11	27							72		"	"	Never pregnant Small sub serous fibroid Operated
12	Mrs. C	35	"		54 5	155		69	49 5	13	17	19 5						"	71 7		"	"	
13	O B	49	"			161		74	54	16	15	23						"	73		"	"	Prolapsus uteri, varicocele, hemorrhoids
14	A A	35	"		66	164		68	50	13 5	15 5	21						"	73 5		"	"	Perineum and uterus normal
15	Nellie K	30	"		61	160	75	68	50	16	13 5	20 5						F	73 5		"	"	Standing 65, End 76 9, tip of R K can be felt but is not movable
16	Mrs W	34	"		61	165		68	50	15 5	15	19 5						L	73 5		"	"	Tip of R K felt on deep inspiration
17	M C	37	"		62	157		68	50	14 5	12	23 5							73 5		"	"	
18	J H M	30	"	0	65	164	79	74	54 5	16	14	24 5						"	73 6		"	"	Abd very lax, large fibroid of uterus, removed, tip R K palpable on deep insp
19	May M	40	"			164	85	72	53	16	14	23						"	73 6		"	"	Had fall, thrown forward, then on back, miscarried
20	A C L	56		4	95			76	56 5										74		"	"	Complete procidentia uteri Operated
21	E H L	51	"			167		70 5	52	17	12	24							73 7		"	"	
22	Hulda S	32	S	0	49		74	64	47 5	14	15	18						F	74 2		2d	1st	Both kidneys enlarged from tuberculous pyelonephrosis
23	C S	22	"	0	71	169	79	71	53	13 5	16 5	23						L	74 5		N	N	
24	G P	34	M		66	166		72	54	15	11 5	27 5							75		"	"	No corset worn
25	E I	31	"	0	50	151		64	48	13 5	15	19 5						L	75		"	"	
26	Mrs N	24	"		62	163	75	68	51	14	14	23						"	75		"	"	Pregnant 3 mo , abd lax, easily palpable
27	A A S	34	"		57	154		67	51	13	15	23						"	76		"	"	Laceration of perineum and cervix, abd very lax, tip of R K felt standing
28	E E M	39	"		61	162	75	67	51	13 5	16	21 5						F	76		"	"	Perineum and uterus normal, abdominal walls firm
29	Annie A	31	"	0	65	165	82	71	54	15 5	15	24 5						F	76		"	"	Hard worker, chronic salpingitis, one miscarriage
30	I L M	37	"	0			78	68	52	14 5	14 5	24							76 4		"	"	Had fall, striking on head and back
31	Mrs C	35	"	6	77	164	85	72	55	15	15	25						9 10	76 4		2d	"	Six miscarriages, lacerated perineum rectocele, cystocele, 3 years ago fell six feet from stepladder
																		L					
32	Mrs H	27	"		63	165		66	51	15 5	14 5	21							77 3		"	"	
33	Kate F	31	"	1	52	159	77	66	51	15	17	19							77 2		½	"	Three miscarriages, pulmonary tuberculosis, has lost much weight
34	Sigrid P	22	S	0	68		77	66	51	15	15	21							77 2		N	"	
35	M B	57	M		67	162	82	68	52	14	14	24							76 4		2d	2d	Marked visceral ptosis, abdomen quite fat, fall on back 1½ years before
36	Augusta F	27	S	0	53	165	77	65	50	15	14	21						F	77		½	N	
37	F S	21	"	0				68	53	16	12	25							78		2d	"	Fall on buttocks 8 mo before, operated for append 6 mo before, nephropexy
38	Miss E	26	"	0	69 5	170	76	69	54	16	14	23						F	78 2		1st	"	Chest deformed, marked projection forward of ribs on right side
39	A B	27	M		54 5	159		62	50	14	16	20						L	80 6		"	½	Procidentia uteri
40	D McL	25	"		55		79	67	53	12 5	18 5	22						"	80		2d	N	R K operated in 1899, in New York, tip of R K only palpable in 1900
41	Mary McC	38	S	0	57 2	162	73	65	52	14	13	25						F	80		1st	"	One year ago kidney more fully movable than at present, much pain in back
42	P D R	41	M	4		162	74	62	50	15	15 5	19 5						"	80 6		"	½	Had fall in 1898
43	Carrie L	41	"	10	45 5	156	73 5	60 5	49	13	14	22						"	81		2d	1st	Abdomen very lax, standing, 58
44	L A	29	"	0	58		73	65	53	15	16	22						L	81 5		1st	N	Uterus and perineum normal
45	Mrs D	40	"	2	58		75	64	52	14 5	15 5	22						L	81 2		2d	"	Pregnant three months
46	M C	21	S	0	54	162		63	52	16	12 5	23 5						"	82 5		½	⅓	
47	H B	40	M	0		162		61 5	50 5	14 5	17	19						"	82 1		3d	N	Never pregnant, hysterectomy two years before, severe symptoms
48	L W	54	"					64 5	53	14	14 5	24 5							82 1		1st	"	Right inguinal hernia for years, fall on back one year before
49	W C W	31	"	2	51	159	70	69	48 5	12 5	15	22						F	82 5		2d	"	Perineum normal, uterus retroverted, nephropexy and shortening round liga
50	H S	60	"	2		167		65	53	15	16 5	21 5						L	81 5		1st	"	
51	C A	30	S	0	44	153		57	47	13	15	19							82 4		2d	"	Neurasthenia
52	A L	22	"	0	64	165		66	54	15	15	24						"	81 8		"	"	
53	E H	37	M					61	50	16 5	14 5	19							82		1st	"	Retroflexio uteri
54	T H B	26	"	0	46	154	70 5	58	48	13 5	14	20 5						L	82 7		½	"	One miscarriage at seven months from fall, left salpingitis
55	Annie J	29	S	0	62	166		67	55 5	15 5	13	27						"	82 8		1st	"	
56	Mrs P	38	M		45 4	156		59 5	49 5	14	14 5	27						"	83 2		2d	1st	Perineum and uterus normal
57	Mamie C	27	"	0	58	161		61	51	15 5	13 5	22						"	83 6		1st	N	Perineum and uterus normal
58	Miss B	37	S	0	50	162	73 5	63	53	14	14	25						"	84		"	½	Salpingitis, small fibroid of uterus, salpingectomy and myomectomy
59	N K	40	M	4		164		65 5	55	14	14	27							84		2d	2d	Perineum and uterus normal fall 1½ yr before, fracturing left 10th rib
60	F G	34	"	3	63	168		68	57	16	16 5	24 5						"	83 8		"	½	Slight laceration of perineum, ut norm
61	Mrs S	32	"		59	157		59	49 5	13	15 5	21						"	84		1st	N	
62	I S	38			48	156		57	48	13	13 5	19 5							84 2		"	⅓	Perineum and uterus normal
63	N S	28	S	0				59	50										85		2d	N	Nephropexy
64	Mrs G	37	M		66	177	77	66	56	15	16	25						F	84 8		"	2d	Two years before fell down stairs had right perirenal abscess
65	Mrs S	24	"	1	52	157	67	56	48	13	14	21						"	85 7		"	"	Abd muscles firm worked in dry goods store 4½ years lifting overhead boxes
66	Miss F	21	S	0		163	71	57 5	49 5	13	17	19 5						L	86		"	N	Nephropexy, May, 1898, Dec , 1900, kidney still in place
67	Fl'r'nce H	31	"	0	53 6	163	73	61	53	13 5	15	24 5						F	86 8			1st	Worked in dry goods store for several years Quite severe symptoms
68	Mrs B	39	M	4	66	172	77 5	63	55	16	18	21						"	87		"	N	Uterus normal at times slight laceration of perin perrineorrhaphy, nephropexy
69	S S	29	"	2	57	163	5	59	51	15	13 5	22 5							86 4			1st	Laceration of cervix, perineum epilepsy
70	Cora N	26	S	0	54 5	170	69	57	50	13	17	20						F	87 7		"	"	Fall on back 4 mo before been troubled with urinary symptoms long before fall
71	A H	44	M		49	155	68	56	49	13	15	21						"	87 5		"	"	Hysterectomy for fibroids
72	W A M	33	"	2	51	165		60	53	19	13	21						L	88		1st	N	Laceration cervix and pelvic floor, retroversion and prolapse of uterus

Number	Females	Age	Married or single	No of children	Weight	Height	Circumference at lower end of sternum	Circumference at lower edge of 10th rib	Jugulo sym physis	Length of up per zone	Length middle zone	Length of lower zone	Lateral diam eter, upper	Lateral diam eter middle	Lateral diam eter lower	Anterior post diam upper	Anterior post diam mid	Condition of 10th rib	Index No 1	Index No 2		Right kidney	Left kidney	Remarks
73	R L	37	S	0		165		60	53	15	17 5	20 5						F	88			2d		Cystitis
74	Mrs E	24	M		44 5	160		56	49 5	14	16	19 5						L	88 4				"	
75	Miss R	33	S	0	47 5	161		56	49	14	15 5	20							88 5			1st	½	
76	L C	20	M	2		160	67	56	50	14	16 5	19 5						F	89 3			2d		Laceration cervix retroflexio uteri
77	M H W	31		2	53	165	71	59	53	15	15 5	23 5							90				2d	One miscarriage uterus norm , had fall
78	A L	29	"	3	52	163		61	55	14	15 5	25 5						L	90			1st	⅓	Left ovary prolapsed and tender
79	H A P	23	S	0	52	169		58 5	53	15	13 5	24							90 5				½	
80	Mrs J	26	M	0	54 5	161		58	53	13 5	15 5	24							91 3				⅓	
81	Miss S	23	S	0	47	164	68	57	54	14	16 5	23 5						L	94 7			2d	1st	
82	Miss B	38		0	53	162	72	61 5	55	15	15	25							89 4				"	Right kidney somewhat enlarged
83	D R	28		0	42	153	66	51	51	14	16	21							100			1st	"	Pyelitis of R K probably tuberculous

SECOND SERIES

84	A N	43	M	8	53	160	76 5	71	49	14	13	22	23	21	29 5	17 5	16	F	69	91 3	83 4	N	N	
85	M C	53		2	65	157	83	72	51	14	13	24	24	20	32	17	17		70 8	83 3	83 3		"	
86	C P	69	S	0	45	155	74 5	65 5	46 5	14	12 5	19 5	25	21	30	17 5	15	L	71	84	72		"	
87	A S	34	S	0	51 7	160	78	70	50	13	15 5	21 5	23	20	30	17 5	16	F	71 4	87	79 5	"	"	
88	J C	33	M	3	50 7	155	74	67	48	14	13 5	20 5	24	20	29	17	15	L	71 6	83 3	73 5	"	"	
89	E M	32			64	170	83	73	53	15	13 5	24	26	21	30	18	16 5	F	72 6	80 8	74	"	"	
90	T N	30		4	48 6	155	78	70	51	14	15	22	26	22	29	16	17	"	72 8	84 6	89 9	"	"	
91	S F	45		5	53	165	75	68 5	50	15	14	21	23	20	29	17	14	L	73	87	71 6		"	
92	G P	45	S	0	45	162	74 5	64	47	14 5	12	20 5	24	20	23 5	17	15 5	F	73 4	83 3	76		"	Hystero-myomectomy for immense fibroids filling abdomen
93	A L	30	M	3	45	162	71	68	50	15	14	21	24	21	29	18	17	"	73 5	87 5	82 6		"	
94	M J	36	S	0	48	167	80	74	54 5	14 5	14 5	23 5	23	20	23	18	16	F	73 6	87	77 5	N	N	
95	S A	43		0	44 7	152	71	66 5	49	14	15	20	23	20	29	15	14	L	73 6	87	81 1		"	
96	A G	38	"	0	51	162	72	66 5	49	14	13 5	21 5	22	17 5	27	17	15		73 6	79 5	70 2	⅓	"	Very lax abd wall palpable, not movable
97	E G	42	M	5	44	157	70	64 5	47 5	15	14 5	18	24	20	28	16	14	F	73 6	83 3	73	½	"	
98	J D	33		7	57	162	81	70 5	52	16	15 5	21 2	25	20	30	19	15		73 7	71 4	56 4	2d	"	
99	S B	59	"	4	43 9	155	68	65	48	14	12 5	21 5	22	20	27	16	15	L	73 8	90 9	85 2	N	"	
100	I C	44		1	51 8	157	73	65	48	13	14	21	22	18	27	17	16	F	73 8	81 8	77			
101	N W	41	S	0	55 6	162	71	67 5	50	15	15	20	23	19 5	28	15	15		74	88 6	88 6		"	
102	J T	36		0	53	152	79 5	67	50	13	15	22	26	21	28	16	15	L	74 6	80 8	75 7		"	
103	G B	55		0	53	163	75	65	49	14 5	13 5	20	23	17	30 5	17 5	14		75	73 9	59 2	2d	"	Lax abd lower ribs flaring
104	M W	28	M	5	55	160	76 5	67 5	51	13	17	21	25 5	22	28 5	15	16	"	75 5	86 2	86 8	N	"	Very lax viscera easily palpable
105	R H	46	S	0	55	172	76	68	52	14	16 5	21 5	22	20	30	19	16	F	76 4	90 9	76 5		"	
106	E S	33		0	50	160	71	64 5	50	13	15 5	21 5	23	20	29	17	16		77 5	87	81 8			
107	D B	44	M	3	61	162	78	68	53	16 5	15 5	21	27	20	30	17	15	L	77 8	74		2d	½	Enlarged gall bladder filled with stones well defined Riedel's lobe cholecystostomy, nephropexy
108	M B	29	"		55	162	75	67 5	53	15 5	15	22 5	23	19	27	18	16	F	78 5	82 6	73 4	N	N	
109	T O B	32		2	57	165	77	66	52	15	15	22	24	20	30	18	17		78 8	83 3	78 7			
110	H S	27	S	0	61	158	82	67	53	14	17	22	27	20	31	18	15	L	79 1	74	61 7	2d	"	Received severe jar against back 1 month before
111	H J	47	M	2	48	162	70	63	50	13	15	22	23	16	28	17	14		79 3	69 5	57 3	Tip	1	R K movable nephropexy was done a year before (60 standing)
112	M W	32	S	0		161	73	63	50	16	14	20	25	20	29	16	15	F	79 3	80	75		1st	Abd lax nothing in location of R K can be felt has vent hernia fol laparotomy
113	K C	43	M	2	62	167	81	70	56	16	16	24	25	17	29 5	15	15	L	80	68	49 4	2d	N	Marked visceral ptosis
114	E H	37		0	47	162	71	61	49	14	14	21	22	17	28				80 3	77 2		2d		Had fall from tree at 18 was laid up 5 mo
115	M L W	30	S	0	56	157	71 5	65	53	14	16 5	22 5	22	16	28	18	15	"	81 5	72 7	60 6	2d		Had fall from street car 1½ years before was doubled up by footboard
116	Lucy W		M	2	57	153	73	62 5	51	13	14	24	22 5	16	28	17	15	F	81 6	71 1		2d	⅓	
117	A L	37		6	60	170	77	68 5	56	14	16	26	25 5	18	32	16	16	L	81 7	70 5	70 5	3d	1	
118	B S	34		4	54	165	76	61	50 5	16 5	14 5	19 5	24	17	27 5	17	14	F	82 8	70 8	58 3	1st	N	
119	C B	31	S	0	45	165	74	59	50	13 5	14 5	22	22	16 5	26	18	13	L	84 7	75	54 4		½	
120	M McK	47		0	48	172	72 5	61	52	14 5	16 5	21	23	18	30	17	13	F	85 2	78 2	60		N	
121	F Van D	40	M	3	65	167	72 5	62	53 5	15 5	14	24	22	18	30	18	14	L	86 3	81 8	63 6		"	
122	A S	32		1	51	160	77 5	61	53	14	15 5	23 5	25	17	29	17	12		86 9	68	55 3	2d		
123	J A	32	S	0	47	172	70 5	58 5	51 5	15 5	16	20	23	17	30	16	13	F	88	73 9		1st	"	
124	E K	31		0	72 2	177	83 5	63 5	56	16 5	17	22 5	23	17	32	18	15		88 2	73 9		3d	½	Mucous colitis
125	K H	28		0	47	167	69 5	56	52	15	14 5	22 5	25	17	27	17	14	L	92 8	68		1st	N	
126	H V	23		0	45	152	66	56	52	14 5	16	21 5	20	15	26	16	14	F	92 8	75			"	

Number	Children	Sex	Age	Weight	Height	Circumference lower end of sternum	Circumference lower edge of 10th rib	Jugulo symph	Length of up per zone	Length middle zone	Length lower zone	Lateral diam eter upper	Lateral diam eter middle	Lateral diam eter lower	Ant post diam upper	Ant post diam middle	Condition of 10th rib	Index No 1	Index No 2	Right kidney	Left kidney	Remarks
1	G O'C	F	3 5	13	89		42	29	8 5	9 5	11							70				
2	C E	M	12	38	154	73 5	65	45 5	14	12 5	19	25	22	26	18	17	L	70	88			
3	G S	M	4	14	94 5		43	31	9 5	10 5	11							72				
4	E B	F	8	17	118		46	33	9	9 5	14 5							72				
5	C A	M	10	26	129		53	39	11	12	15 5							74				
6	H S		9	25 4	124		52	39	11	14	14							75				
7	W K		14	56	173	75	68	51	16 5	16 5	18						F	75				
8	J F	"	11	31	140	67	59	45	12 5	13	19 5							76				
9	H E		7 5	21	112 5		50	38	10	15 5	12 5							76				
10	A M	F	6	20	115		51	39	10 5	14 5	14							76 5				
11	H G		16	53	167	73	63 5	50	13	15	22						F	78				
12	E M		16		149		61	49	13 5	14	21 5							80				Chronic appendicitis operation
13	M S	M	6 5	17	107		47	37 5	11	13	13 5							80		N		
14	C S	F	9	22	126		49	39	10	16	13							80				
15	M H		11	29	144	62	54	44	12	13	19						F	81 5		"		Colored
16	R S	M	6	15	106		43	35 5	10	13 5	12							82		"		
17	A E J		16	54	166	71	63	52	16	16	20						L	82 4		½	⅓	Thrown out of wagon broke leg
18	M G	F	16	63	163	78	64	53	14 5	15 5	33							82 8		1st	N	Two falls Three years ago fell striking side on sled two years ago fell down stairs
19	M O C		12	36 3	151	69	59	49	13 5	14 5	21	21	19	23	17	17		83	90 5	N		
20	M B		10	27	132		51	43	10 5	14 5	18							84				
21	W H	M	11	35	148	67	57 5	48 5	13 5	14 5	20 5						L	84 3				
22	H W	F	10	25	129	57 5	51 5	44	10	16	19							85		⅓		
23	F P		13	37	153	61	51 5	44	12	15	17						"	85		Tip		
24	G H		16	48	162		58 5	50	12	16	22							85		½		Chronic appendicitis
25	A P	"	14 5	40	155		55	48	14	16	18							86		Tip		
26	S V		9	26	132		50	43	11 5	14	17							86		N		
27	H G		14		159		54 5	47 5	13 5	15	19						L	87				
28	I T	M	7	21	116		46	40	11	6	13						Tip	87		"		Tall, slim rapid growth

Number	Males	Age	Weight	Height	Circumference lower end of sternum	Circumference lower edge of 10th rib	Jugule symph	Length of upper zone	Length middle zone	Length lower zone	Lateral diam upper	Lateral diam middle	Lateral diam lower	Antero post diam upper	Antero-post diam middle	Condition 10th rib	Index No 1	Index No 2	Right kidney	Left kidney	Remarks
1	G H	32	89	177	91	89	56	15	18	23							63				
2	Mr ——	50	83	170	90	83	53	16	15	22	29	25	29	19	20		63 8	86			
3	W C S	39	67			76	49	15	13	21							64 4				
4	Mr L	45	84 5	177 5		88	58	16	18	24							66				
5	C W M	23	86	181		87	58	18 5	16	23 5											
6	Mr J	41	77 3	175	89	79	55	17	16	22						L	67				
7	F E	30	67 7	172	84	74	52	18	15	19						F	69 6				
8	J F	33	70	173	86	75	53	18	16	19						F	70 2				
9	L B F	36	69	176	81	76	54	16	17 5	20 5							70 6				
10	V E R	22	77	170	87	72 5	52	15 5	18 5	18						L	71				Chronic appendicitis
11	T C	30	66	178	80	71	52	15 5	18 5	17						F	71 7				
12	C C	40	62	166		75	55	17	16	20							73 2				Chronic appendicitis operation
13	J F W	31		171	80 5	69 5	51	15	17	19	25	22	27	19	19	Tip	73 3	88	Negative	Negative	L A C 73 Professional tumbler well developed
14	B M	35	61	164		70	52	16 5	17 5	18							74 2				
15	F H V	40	60			68	51	18	14	19							67				
16	C C	30	70	172	85	73	55	18	15	22	29 5	25	28	18	17	L	75 3	84 7			L A C 71
17	C K	25	62	172	75	66	50	16	17	17						L	75 7				
18	H F	26	70	180	80	71	54	15	18	21							76				Chronic appendicitis Operation
19	Mr P	56	55 4	165		66	50	16	16	18							75 7				
20	E R	28	68		81	71	54	16 5	19	18 5							76				[bloody urine
21	B E V	42	66	184	80	73	56	18	16	22	26	22	29	19	18	F	76 7	84 6	2nd		In 1882 fell 8 ft on buttocks, in 1900 fell 6 ft Had
22	G H	27	73	180	83	72	56 5	18	17	21 5							78 4		¼		¼ of kidney felt, but not movable slender, chronic
23	R A C	43	75	176		74	58	17 5	21	19 5						L	78 4		½		[appendicitis
24	G C A	20	55	175	73	65	52	15	17	20							78 8		½	½	Valvular heart disease Enlarged liver and spleen
25	L O B	19	55	178		70	55	16	20	19						L	78 6		✓	✓	Very thin Rapid growth Chronic appendicitis
26	J B	45		177		68 5	55	19	19	17							80 3		✓	✓	Emaciated Carcinoma of stomach
27	M T M	23	64	175		67	57	16	21 5	19							85		✓	✓	

in a movable kidney which was discovered immediately after an accident is not the slightest proof of any connection between the accident and the movable kidney nor are all other subjective symptoms of any proof so long as it can not be demonstrated with unequivocal certainty that the kidney before that time was not movable"

A simple fall is insufficient to give rise to a movable kidney in the presence of normal relations The injury must be severe enough to produce a rupture or laceration of the tissues which normally surround and fix the organ, in which case symptoms sufficiently marked to direct attention to the nature of the injury will always be present The kinds of injuries most liable to produce such lacerations are

1 Severe falls upon the buttocks in a sitting position

2 The body is thrown violently against some object striking the region of the kidney so as to forcibly adduct the lower or loose ribs The same effect is produced if the object be movable and the body stationary

3 This region of the body is compressed between two opposing forces Such injuries may produce lacerations of the perirenal adipose tissue with the formation of a perirenal hematoma which may vary much in size These hematomata are retroperitoneal and it is the exception when the peritoneum is torn Symptoms of sufficient severity to direct immediate attention to the region of the kidney are always present in case of laceration with the formation of a hematoma of any material size The swelling produced by the hematoma may also be usually felt on palpation, although the tenderness may be so severe as to interfere in this direction Accompanying the absorption of such an hematoma an increased amount of connective tissue usually forms in the adipose capsule which may fix the kidney more firmly than before On the other hand the hematoma may dissect up the perirenal fat or lead to the formation of a perirenal serous cyst in the loose space of which the kidney may move about and thus an injury may be the direct cause of a movable kidney

The symptoms which immediately follow the injury will direct attention to this possibility, but such cases are rare Of course an injury may produce a laceration of the kidney proper without the formation of a perirenal hematoma or the two conditions may co-exist When the kidney substance is lacerated or the pelvis opened the presence of hematuria will direct attention to the fact

It should be remembered that in the presence of a movable kidney a slight injury such as a fall or jarring of the body, or straining at lifting, may produce a slight hematuria for a few days without the occurrence of a material lesion in the kidney or other symptoms particularly referable to this organ In fact this is so common that the presence of such an hematuria following a slight injury should at once suggest the possibility of a movable kidney and lead to an examination with this point in view The more often such examinations are made immediately following such injuries the less often will it be found that the injury had aught to do with causing the movable kidney

The fact that a movable kidney is surrounded by a loose peritoneal and connective tissue pouch which must necessarily be of slow formation, precludes the possibility of a movable kidney being produced suddenly by an injury It is in just this class of cases that the value of correctly estimating the body form by the measurements as herein mentioned is so apparent Thus if a woman with an unmistakable body form of the positive type present herself with a movable kidney which is said to have followed an injury it may with practical certainty be asserted that the movable kidney is the result of the body form and arose independently of the injury The injury but calls attention to a condition already present but perhaps unrecognized Of course it is not denied that a movable kidney may be aggravated by an injury or that such a kidney may be injured by external violence as well as a kidney that is fixed

Of the cases comprising the table there were two belonging to the negative type in which a history of an accident, such as might have injured a kidney, was present, but in neither of these could the kidney be felt

Of the positive cases, 7 gave a history of a fall or other injury One, No 70, was not aware she had a movable kidney but gave a history of unmistakable symptoms referable to the urinary organs and stomach which antedated the injury thus clearly eliminating the injury as a causal factor in the movable kidney

In Case No 110 the injury a jarring of the back was claimed as the cause of the movable kidney She

was examined within a month after the injury when the kidney was found so freely movable and so devoid of tenderness and the injury was so slight as to preclude the possibility of a causal connection

Case No 12 had a fall injuring the knee but the region of the kidney was not involved and the presence of the movable kidney not suspected

In Case No 59 the injury was undoubtedly instrumental in producing the mobility of the left kidney The right kidney was also very movable, but this was an old condition Following a rather severe injury to the left side in which the left 10th rib was fractured there developed a large swelling hematoma about the left kidney which was very painful was accompanied by hematuria and confined the patient to bed for several weeks The swelling was several months in disappearing and a year after the accident the kidney was still somewhat enlarged tender and movable In this case there was no question as to the injury to the kidney and its surroundings

In Case No 37 it was first thought that the injury bore a causal relation to the movable kidney A chair was removed from behind the patient as she was about to sit down She sat down on the floor very heavily Considerable pain and tenderness in the right side with light fever followed for some time The tenderness was so limited to the region of the cecum that chronic appendicitis was diagnosed Some two months later the appendix was removed It was not found to be directly involved but recent adhesions were found between the cecum and ascending colon and the abdominal wall Six months later the patient returned still complaining of pain in the back and right side The freely movable kidney was now recognized and nephrorrhaphy performed with relief from the symptoms It seems probable, after reviewing this case with the knowledge furnished by the two operations that the kidney was movable at the time of the fall and that the sudden motion given to it by the fall produced the mild traumatic peritonitis about the cecum and colon which produced the symptoms At the operation on the kidney there were no evidences found of an old hematoma nor of unusual formation of connective tissue

In Case No 114 the injury a fall from a tree, occurred twenty years ago and the history was too indefinite and remote to be considered at this date

Case No 35 was a poor hard-working woman with a pendulous abdomen and marked visceral ptosis A year and a half before she fell on her side on the street Both kidneys were movable to the second degree, and it was claimed that the fall was responsible for this condition The fall however, was not a severe one no complaint was made at the time of any trouble in the region of the kidneys the pendulous abdomen and visceral ptosis were present for a long time before the fall It is more than probable therefore that the kidneys were movable at the time of the fall and that the injury had no effect whatever on them Thus of the 7 cases in only one had the injury any causal relation to the movable kidney and in this case a material lesion in the shape of a large perirenal hematoma was present which was distinctly recognized at the time and which produced severe symptoms confining the patient for several weeks to bed

Based upon these facts it may be concluded that the popular belief in the traumatic origin of movable kidney is not supported by the evidence and that it is highly improbable that a single injury such as a fall which does not produce a material lesion of the perirenal tissues recognizable by well-defined symptoms is ever the immediate cause of a movable kidney

It would be of considerable interest to know at what age or period of life the body form becomes established and how soon it influences the location of the kidney I have not sufficient data at present upon which to base an opinion on this point and it can only be determined after a systematic examination of a large number of individuals during the developmental period

The measurements of a number of children are contained in the table but the number is too small to permit of an analysis It is evident, however that in early childhood there is no material difference in the body form of the two sexes The number of men upon whom measurements have been made is also too small to establish normal averages and as there was but one case of movable kidney in the number no differences can be drawn between negative and positive cases The measurements taken however show that the lower zone is much smaller than in women while the middle and upper zones are larger The increased size of the middle zone is particularly suggestive inasmuch as movable kidney is so rare in men compared with women The tendency is to a low index No 1 and a high index No 2 which is characteristic of the negative body form The man in whom the movable kidney was found had two or three severe falls of several feet one of which was followed by hematuria and distinct evidences of a lesion of the kidney

Stiller has somewhat recently called attention to the association of a loose or floating 10th rib and movable kidney He claimed the association was so constant as to establish a relation between the two and a floating 10th rib was therefore called the "Stiller stigma" or the Stiller sign of a movable kidney

The condition of the 10th rib was noted in 110 of my cases 49 of which were negative and 61 positive Of the negative cases the 10th rib was found loose in 26 and fixed in 23 In the positive it was loose in 38, fixed in 22 and in one case both the 9th and 10th were loose By the term "loose" is not necessarily meant absolutely free and floating as are the 11th and 12th ribs, as this condition is not common but in case the attachment of the rib to the costal arch was so slight as to permit considerable free motion independent of the costal arch it was said to be "loose" In case the attachment was so firm as to prevent any material independent motion it was said to be "fixed" From my examinations, therefore Stiller's observations can not be confirmed While a loose 10th rib is the rule in women it bears no definite relation to the presence or absence of a movable kidney

The contraction of the middle zone explains the great frequency with which the so-called vertical stomach is associated with movable kidney as the pylorus and upper duodenum descend more or less with the kidney while the cardia remains fixed by the esophagus

It is not the intention to discuss the clinical aspect of movable kidney hence the symptomatology, diagnosis, etc will be passed without further remarks

Concerning the treatment, attention will be briefly directed only to the method of operating, but it is not to be understood by this that it is necessary to operate all cases, as such is far from being the case However, when it is decided that the symptoms with which a patient suffers are due to the movable kidney there is little reason to hope for permanent relief by any other

method than that of operative fixation of the organ The tendency in recent times has been to fix the kidney too high up, apparently from the idea that the disturbances were due rather to the fact that the kidney was too low than that it was too freely movable If the points brought out in this contribution are correct, the descent of the kidney has been brought about by the fact that the middle zone of the body cavity, in which the major portion of this organ normally should lie, is too small to contain it It would therefore appear unreasonable to attempt to fix the kidney in a cavity too small for it and from which it had been ejected

Should this be done however the same factors which caused the kidney to become movable in the first place are again brought into action with the probabilities of a recurrence Or should the kidney be so firmly fixed in a high position that it can not again be displaced, symptoms even more severe than those for which the operation was undertaken may result The author has recently seen two such cases operated on by most excellent surgeons one in Chicago and the other in New York, with perfect operative result The kidneys were high and firmly fixed, yet in both cases suffered infinitely more after the operation than they did before, and in one case the suffering became so intense that about two years after the first operation relief was obtained by removing the kidney entirely

The principle then that should guide us in fixing a movable kidney is to take into consideration the body form and fix the organ in a location where it will not again be subjected to the same influences which caused its descent This means that the kidney should not be crowded up to the highest point, but fixed lower down, in an easy position and so the ureter will escape at the most dependent part If this be done the chief cause of relapse will be removed The method of operating is as follows

A muscle splitting incision is made beginning a little in front of the tip of the 12th rib and extending downward, forward and inward in the line of the fibers of the external oblique muscle These are separated bluntly and then the fibers of the internal oblique and transversalis, which cross the line of incision at almost a right angle, are separated in the same manner The peritoneum is carried inward and the perirenal space entered All the perirenal fat is removed, but the prerenal fascia is carefully preserved The upper portion of the ureter should be examined to see that it is not fixed and thus become flexed or kinked by moving the kidney The prerenal fascia with the peritoneum covering it, and to which it is usually quite firmly attached throughout its anterior and inner portions forms the pouch or sac in which the kidney moves This space, bounded by the prerenal and retrorenal fasciæ, sometimes called "Gerotta's space," is somewhat triangular in shape with its apex extending downward toward the brim of the pelvis

The object of the operation is to so close this space and contract the pouch or sac that the kidney will no longer have a free space in which to move This is accomplished by closing this space from before backward with catgut sutures The colon lies just anterior to this space and should not be injured Should the pouch in which the kidney moves be very large and bulge the peritoneum to the inner side of the colon, a small opening may be made into the peritoneal cavity just to the outer side of the colon and the sutures passed through the mesocolon from within, thus approximating this layer to the posterior abdominal wall and obliterating or diminishing the pouch By passing the sutures in this manner the danger of including the colica dextra or sinistra artery, as the case may be, in them is avoided The branches of the lumbar plexus of nerves on the posterior wall should also be remembered and care taken not to include them in the sutures

The effect of suturing in this manner is to obliterate the space in which the kidney has been moving up and down The outer edge of the prerenal fascia is then sutured to the lumbar fascia posterior to the line of incision through the walls By drawing more on the upper or lower portion of the fascia the kidney may be rotated on its antero-posterior axis as may be necessary in order to bring the ureter at a proper dependent position When the operation is finished the kidney will be found firmly held in position, yet not so fixed that it can not move up and down slightly, as a normal kidney should during respiration All abnormal excursions of the kidney, however, are completely arrested although the organ occupies a lower position than normal No stitches involve the kidney substance This operation was not of sudden birth, but of gradual development during the past three or four years Clinically the results have been good and in patients examined as long as two years after the operation, the kidney has been found still in the location in which it was fixed, and without any increase in its range of motion In closing, the following conclusions are presented

1 The essential cause of movable kidney lies in a particular body form

2 The chief characteristics of this body form are a marked contraction of the lower end of the middle zone of the body with a diminution in the capacity of this portion of the body cavity

3 This diminution in the capacity of the middle zone depresses the kidney so that the constricted outlet of the zone comes above the center of the organ and all acts, such as coughing, straining, lifting, flexions of the body, etc, which tend to adduct the lower ribs press on the upper pole of the kidney and crowd it still further downward

4 It is the long continued repetition in a suitable body form, of these influences, which collectively may be called internal traumata, that gradually produces a movable kidney

5 A distinctly movable kidney is never the immediate result of a single injury or external trauma

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THE APPENDIX VERMIFORMIS AND CECUM A COMPARATIVE STUDY (1814-1901)

B MERRILL RICKETTS, PH B, M D
CINCINNATI, OHIO

It will be the province of this paper to deal rather extensively with the comparative study of the appendix vermiformis and cecum of a few of the members of each of the four divisions of the sub-kingdom, Vertebrata It will be shown that the appendix vermiformis is not found exclusively in the mammals, but is also found in birds, reptiles and fish

MAMMALS

The colon is largest in mammals, and its junction with the ileum generally has a single cecum The anthropomorphous apes, such as Hylobates (gibbons) Simius satyrus (orang), Troglodytes (chimpanzee and gorilla), each possess a cecum, with a processus vermiformis or appendix, while the cynomorphous apes,

(dog-like) baboon, and mandril etc each have a small cecum without an appendix as do also the Platyrrhini (flat nose) monkeys The long-tailed monkey has a cecum of pyramidal form In the other order of mammals the cecum is generally present but the appendix vermiformis is absent with but few exceptions In the various prosimials—earlier ancestors of monkeys—and in many rodents the cecum gradually narrows into a vermiform appendix In the carnivora the cecum is short and even absent in the bear hedgehog and weasel It is large in the herbivora while the lagomys has one large and one small cecum The small intestine in the camel is 71 feet long the colon and rectum 56 feet and the cecum 3 feet long The cecum is capacious at first then narrow to form spiral convolutions which taper off The small intestine of the elephant is 38 feet in length the colon and rectum 20½ feet and the cecum 1½ feet long The horse has a small intestine 56 feet long the colon and rectum 21 feet and the cecum 2½ feet long the cecum in the young granivorous mammalia while in the suckling stage is as little developed as it is in the carnivora throughout their lives

The hog cow sheep and rhinoceros each possess a very large cecum while that of the tapir is small That of the hog is one-sixth the capacity of the stomach, and is that portion of the alimentary tract used for sausage casings

None of these animals from the camel to the hog just mentioned possess an appendix vermiformis although the carnivora as a rule have an appendix In the dog and cat it is especially large, even though Huxley has stated to the contrary concerning the dog in which there is an appendix as great in diameter as the gut to which it is attached The whale has a cecum but no appendix The manitee has two vermiform appendices, while the seal has only a cecum The beaver has a cecum 2 feet long In the rat the cecum is as long as the stomach while in the hare there is a glandular structure near the valve of the colon, which corresponds to the vermiform appendix The cecum itself is enormous in size The galeopithecus and koala like the Indris, also have enormous ceca The ceca of the mammalia depend on the required amount and kind of food In man, various apes and monkeys the cecum is at first as large as the colon or it grows wider until, at last, it contracts to form a vermiform appendix The opossum has a very simple and short cecum in proportion to its size

Among the marsupials the wombat is found to possess an appendix very much like that in man While the kangaroo has a large cecum without an appendix The Dasyuridæ, another family of the marsupials, has no cecum at all The monotremes possess small worm-like ceca which suggest the belief that the appendix of the wombat is an abruptly atrophied form of the free end of the cecum This is borne out by the fact that the lemuroids have a very long cecum, drawn out into an elongated conical termination The armadillo and hyrax have more than one cecum, the former having two and the latter three The myrmecophaga didactyla, one of the ant-eaters, has two ceca This fact not only bears out the allegations of some writers that the ant-eaters are nearly related to the birds but, in connection with the fact that other animals also have more than one cecum proves the truth of evolution

In general the digestive organs in man in the healthy state resemble those of the carnivora in youth, and in later years those of the herbivora

Those animals which live upon highly nutritious food that requires but comparatively few changes to prepare it for absorption into the body have small rudimentary cecum or none at all while those that feed on vegetable matter possess a rather large one It is highly probable that the cecum in the vegetable eaters plays an important part in the digestive process The continued presence of the cecum in the higher orders of vertebrates is evidence of Nature's attempt to make use of an organ that has lost its original functions Nature does not believe in idleness there can be no existence without work

BIRDS

The ceca (or vermiform appendix) opening into the rectum of birds are particularly long in domestic fowls, such as the pheasant peacock turkey, goose, swan and others that live on vegetables It is less so in the owl, cuckoo crane snipe and pelican It is still shorter in the dove and hoopoos The ostrich has a cecum possessed of a spiral valve as have also the raven thrush finches etc It is shortest of all in the diurnal birds of prey, such as eagles hawks, and falcons The cecum is single in the titmouse storks and gulls but spirally convoluted in the heron bittern (shitepoke—Indian hen), and divers in general It is wanting in parrots, pickers king-fishers and cormorants In birds the ceca are generally paired and vary in extent from short papillæ to long tubes These long tubes are found in the chicken duck, and in the lowest of all recent birds namely, the kiwi-kiwi (apteryx) a wingless bird found in Australia only Two rectal appendices are found in the guinea-hen while all birds generally have two ceca The owl's cecum is longer than any of the carnivorous or piscivorous birds—two ceca Common ducks have two ceca—eight and nine inches long, widest at the middle forming a cone A duckling three weeks old has a cecum three inches long The common pigeon—Columba livia—has two small ceca

REPTILES

Reptiles as a class have no cecal appendix some snakes have a cecum others have but a rectal cecum A long cecum was found in a large African snake The chameleon differs from lizards that live upon animal food in having a short cecum The iguana also has a short cecum The land tortoise of South Carolina has a cecum immediately behind the stomach which is simply a pouch with an oblique valvular opening

FISH

In many instances there are a great number of appendices known as pancreatic ceca, about the stomach of fish, as shown in the white salmon (Stizostidium Americanum), commonly called the wall-eyed pike, in which seven appendices pylori are found, tassel-like in appearance These are especially found in the salmon and common trout They are numerous in the sturgeon, and in the sword-fish they are consolidated into a mass glandular in appearance But in the polyodon sturgeon they are separate They are numerous in the gar pike and many higher fishes They are, however, more numerous and very long in the ling cod-fish and mackerel, and still more numerous in the Teleosteans in which the number of appendices varies from 1 to 200 The pilchard has 50 and the whiting about 120 They also vary in size and width The narrowest serve only as secretory organs the wider are frequently filled with the same contents as the intestines The secretion of

these appendices corresponds to that secreted by the pancreas in man, and is just as important in the process of digestion The Bicher, found in the Nile, possesses only one appendix, while several of the soles have but two small pyloric ceca The food-fish has two large ones Bony fishes as a rule have several or many cecal pouches attached to the commencement of the alimentary canal The cecum is absent in the carp, eel, lamphrey, ray shark and many others, however, they are extremely numerous in the electric eel

It is interesting to know that pyloric ceca have been found in types of still lower subkingdoms

The common cockroach (Pesiplaneta orientalis) has a whorl of eight ceca arranged around the commencement of the chylific stomach, the function of which is probably analogous to that of the liver

The cellar slug (Limnea flavus S varagatus) has a cecal projection at the pyloric end of the stomach

The starfish are the lowest class of animals in which a distinct cecum is found The radial arrangement of the digestive or hepatic ceca may be found in the first ray

CECUM AND VERMIFORM APPENDIX IN MAN

ANATOMY

The minute structure of the appendix offers a wide and unbroken field for research There is very little literature on the histology of the appendix, either normal or pathologic It is known, however, that the appendix resembles in a general way the other intestines in structure The little that is known can be comprised in the statement that the fibers are arranged spirally, and that adenoid tissue is found in its structure A fold of peritoneum forming a mesentery is often found, the blood supplied by a branch of the superior mesenteric artery which varies in size The nerve supply to the superior mesenteric artery extends from the small intestine and large bowel and from the appendix to the splenic flexure

APPENDIX VERMIFORMIS

This is attached to the lower and back part of the cecum It is a long, narrow worm-like tube It varies from one to sixteen inches in length, and its normal diameter also varies greatly Usually it points upward and inward behind the cecum It has been found absent but five times in 10,000 autopsies This is probably due to it being covered by peritoneum, for when so concealed its presence can not be detected by sight or the sense of touch Its length, diameter, position and caliber of its lumen greatly vary An infant at the time of birth may have an appendix as large in every particular as a giant The valve of Gerlach is proportionately larger in infancy than in old age the after-stenosis is probably due to prolonged irritation

THE CECUM

In man the cecum is 2¼ inches in length and 3 inches wide It is the most dilated part of the tube measuring 2½ inches in the vertical and transverse diameters It varies in position, but usually rests upon the psoas muscle, placed so that the apex projects beyond the inner border of that muscle in the male In the female the apex lies internal to the psoas muscle as the pelvis is broader, thus causing that muscle to deviate more to the right than in the male

The apex may be internal or external to Poupart's ligament, upon the pelvis brim, or within the pelvis and covered entirely by the peritoneum, a condition not infrequently found

In the new-born child the cecum is quite undeveloped and the difference in size between the large and small intestine is nearly imperceptible This is true in health during youth In the middle age only does the cecum become much more extended than the small intestine

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ZOOLOGY IN THE MEDICAL SCHOOL CURRICULUM

CH WARDELL STILES PH D
Zoologist United States Bureau of Animal Industry
WASHINGTON, D C

Let it be admitted from the start that this paper is written from the standpoint of a zoologist, hence that it is not entirely free from the charge of being a biased statement, let it also be admitted that the medical school curriculum is already full to overflowing, further that it is not the function of a medical faculty to give to a man a general education, but rather to teach him to diagnose diseases and prescribe treatment

In order to avoid misunderstanding, the writer makes these admissions at the outset, yet he nevertheless contends that zoology should have its place in the medical curriculum, just as much as should chemistry and botany It is not contended that elementary or general zoology should be taught, any more than it would be contended by a chemist or by a botanist that elementary or general chemistry or botany has an inherent right to representation All fair-minded men will, however, admit that a medical curriculum which failed to recognize certain specialties of chemistry and botany for instance toxicology and bacteriology, would indeed appear strange and would not be entirely free from criticism

To the writer as a zoologist, it seems no less strange that few medical schools in this country recognize medical zoology as one of the subjects to be taught Nor does this fact appear to be explained by any requirements of a general or special knowledge of zoology before beginning to study medicine On comparing the medical schools of America with those of Europe, it may be noticed that the transatlantic faculties, almost as a rule, either require zoology of a student before he begins medicine, or require it during his course, or offer it to him as an elective Of American medical faculties —not including the veterinary schools—there are only three, so far as my personal knowledge goes, which recognize medical zoology in the curriculum

I do not refer in this paper to histology and embryology, which all medical schools teach more or less nor even to teratology and evolution but reference is made to the practical and intimate relation which zoology bears to disease and to public hygiene And it is submitted that since medical schools prepare students to practice medicine medical zoology should be included in this preparation with just as equal right as medical chemistry or medical botany It is submitted

that just as we give special lectures on the chemicals (poisons—biochemistry and toxicology) and plants (bacteria—bacteriology) which cause disease so if our instruction is not to be one-sided we should also give courses on the animals which produce pathologic conditions

Such a course should be placed in the third or fourth year of medical studies Experience has, in fact taught that it is not altogether satisfactory to give these lectures to the second and still less to the first year men The course should be composed of both lectures and laboratory work Text-book work is not entirely satisfactory because the works on medical zoology thus far published are either treatises which are more suited as works of reference than they are as text-books or are too brief and "too zoological" to be of much practical use Moreover with all the new work in this line the subject advances from day to day so that at present text-books published prior to 1900 are already more or less out of date The instructor should not spend his time discussing the newest theories of cytology and heredity but should bring forward practical zoologic information of which the physician can make practical use The amount of such data will depend primarily on the amount of time allotted to him and on his own experience in the zoologic groups in question The ideal plan is that followed by the Paris School of Medicine where there is a regular chair of medical natural history now occupied by Raphael Blanchard who takes up such biological subjects as in his judgment are useful to the students He can for instance, give a course on parasitic diseases one term for the entire class a more special one on teratology another term while during a third he may take up some other special field of interest perhaps only to a few students hence only a few will attend

Such an arrangement is scarcely feasible at present in the majority of American medical schools Some instruction is, however feasible and as a basis for this I would present the following as a general outline Two to six lectures may be given as an introduction, according to the time allotted In these may first be discussed the different degrees of parasitism and the relation of parasitism to climate seasons age, sex, race, personal habits, etc , the different ways in which parasites affect their hosts the general and public hygienic measures , the classification of parasites At this point an hour should be given to a discussion of the classificatory names and the rules which govern them—rules of nomenclature The object of presenting this rather special subject to medical students is to show them the methods of nomenclature followed in a science where we deal with hundreds of thousands of technical names, basing their use on a certain system, by so doing we can give to some of the future bacteriologists the experience of a century and a half of nomenclatural work in zoology so that they may some day succeed in rescuing the nomenclature of bacteriology from the frightfully chaotic state into which it is falling or has already fallen

From this subject the lecturer can pass to the lowest animals and discuss Amiba coli described as the cause of amibic dysentery after reviewing the various other amibæ reported for man—for instance Amiba intestinalis A urogenitalis A buccalis etc he can take up the three parasites of malaria—Plasmodium malariæ P vivax P præcox—and discuss the disease from a zoologic standpoint its transmission by Anopheles but not by Culex etc Next reference would naturally be made to Texas fever caused by another sporozoon—Piroplasma bigeminum—for which a tick known as Boophilus bovis is the intermediate host The national economic importance of and quarantine against the disease can be referred to, also the economic importance of diseases of fish produced by the Myxosporidia, and of silkworms, produced by Microsporidia, the Sarcosporidia, as well as Gilchrist's Coccidioides, and the parasitic theory of cancer should of course, be mentioned

Passing up in the animal kingdom, the various ciliate and flagellate parasites of man—none of them of much medical importance—can be touched on, then the medicinal sponges should be exhibited while they and the coelenterata can be described in the various medical relations—as accessory instruments, as instruments for murder as cause of urticaria, as producing shock as treatment used in various countries

Next naturally follow the trematode worms, which are parasitic in man—Monostomulum lentis, Agamodistomum ophthalmobium Fasciola hepatica, Fasciolopsis Buski Paragonimus Westermanii Dicrocoelium lanceatum Opisthorchis felineus, O sinensis Heterophyes heterophyes Schistosoma hæmatobium Amphistoma hominis Most of these parasites have been unimportant for the American medical profession, up to the present time but now that Paragonimus is established in this country it becomes of no little importance as a cause of parasitic hemoptysis and Jacksonian epilepsy Furthermore our troops being in Asia now make Opisthorchis and Fasciolopsis important genera for us

The tapeworms come next Tænia solium T saginata, T confusa T africana Dipylidium caninum, Hymenolepis murina H diminuta Davainea madagascariensis, Dibothriocephalus latus D cordatus Diplogonoporus grandis Ligula Mansoni and the troubles they produce, also hydatid disease and pseudotuberculosis caused by larval tapeworms

It seems remarkable to me that most physicians do not appear to go beyond the fact that a patient has a tapeworm What particular species is present does not interest him This lack of detail is a natural result of not presenting to the students the difference in medical importance represented by the various species

Following the tapeworms the round worms of man may be discussed Ascaris lumbricoides, Oxyuris vermicularis, Strongylus longevaginatus, Uncinaria duodenalis and its relation to anemia, Dioctophyme renale, Trichuris trichiura Trichinella spiralis—as cause of trichinosis—Filaria and elephantiasis, Strongyloides in diarrhea, Gordius, Mermis, and Gigantorhynchus

After the worms come the parasitic arachnoidea Sarcoptes, the cause of itch, the national economic importance of Psoroptes, Demodex, the ticks, and Linguatula and Porocephalus Here are also discussed the poisonous spiders, scorpions, etc Then the insects, both as pests and as transmitters of disease finally the poisonous snakes

I do not insist that every physician should keep the above scientific names in mind, but I do submit that with so many American troops in the East every physician who pretends to know that tuberculosis is produced by the Bacillus tuberculosis should also know that parasitic hemoptysis—so common in Asia and already introduced into this country—is caused by Paragonimus, I will not insist on his being able to recall all the various liver-flukes by their eggs or names but it is not unreasonable to maintain that he should know that quite a common liver disease in Asia is caused by

Opisthorchis sinensis, while the Russian troops—with whom our troops have been associated—are subject to O felineus (O tenuicollis), hence some of the liver troubles of which our returning troops are likely to complain can be diagnosed only by recognizing the eggs of these worms in a microscopic examination of the feces I do not argue that our medical students should be able to distinguish the millions of insects in the world, or that they should make a collection of beetles instead of bones, but in view of the demonstration that certain species of mosquitoes, belonging to the genus Anopheles, transmit malaria, other mosquitoes belonging to the genus Culex transmit filarial elephantiasis, and Culex fasciatus is now alleged to transmit yellow fever it does not appear extreme to advance the view that physicians should know something about the breeding habits of these insects It is not the intention to try to introduce abstract zoologic work into medical colleges, but when we consider how often patients are treated for worms when they have none, and how often they have some which for a long time escape diagnosis it seems justifiable to suggest that if medical students were taught how to distinguish the eggs of various orders by a microscopic examination of the feces, the liability to error in diagnosis would be diminished

The time will probably never come when our professors of practice will think it best not to discuss malaria, dysentery, trichinosis, and other diseases associated with animal parasites, and we should in fact be opposed to having the clinical side of these maladies turned over entirely to zoologists Still, the subject of practice is so broad that no one man—not even an Osler—can hope to keep up to date in the entire literature bearing on all its phases By common consent the chair of practice surrenders the phytoparasites to a botanist or a bacteriologist, and my contention is that if our medical schools are to keep abreast of the times in practice, pathology, and hygiene, the subject of animal parasitism should be treated in a special course, by a special man, preferably by a professional zoologist, if the services of one who has worked in the groups in question can be obtained, otherwise by a physician who has had a general zoologic and special helminthologic training

Such a course as outlined above should be allotted between twenty and thirty lectures and at least three laboratory exercises, although under pressure the field may be covered—though with less satisfaction to the instructor—in about eighteen lectures

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ANTIPNEUMOCOCCIC SERUM TREATMENT OF PNEUMONIA, WITH REPORT OF CASES *

G E TYLER, M D

Secretary Colorado State Board of Health, Adjunct Professor of Medicine, Gross Medical College Visiting Physician to St. Anthony's Hospital and to the Arapahoe County Hospital

DENVER, COLO

DISCOVERY

In 1888 Netter rendered mice and rabbits immune to pneumonia by injecting them with a fluid prepared from the dried spleen of infected animals Later he used an old pneumococcus pleuritic exudate, and still later the sputum of a pneumonia patient after the crisis

Foa was able to produce in animals, an immunity lasting several months, by injecting a serum made by a precipitation of a bouillon culture of the pneumococcus with ammonium sulphate and repeated filtration His method was to inject the filtrate intravenously into rabbits for three or four days Later he made an extract of the muscles and viscera of a rabbit, dead of pneumonia, precipitated it in the same way, used it in the same manner, and was able to produce the same immunity, though a similar extract from a healthy rabbit produced no effect

Klemperer Brothers experimented with a pneumococcus pleuritic exudate which was demonstrated, by cultural methods, to contain no living organisms They injected two rabbits with 20 c c each, and fourteen days later they inoculated both these animals with a virulent culture of the pneumococcus Both survived, though the control animal died They also succeeded in rendering dogs immune Later they demonstrated the curative properties of the serum of animals rendered immune to pneumococcus infection

Pane and De Renzi inoculated animals with the pneumococcus and from them obtained a powerful antipneumonic serum They submitted their results to the Medical and Surgical Academy of Naples, and this body, after repeated tests, declared the serum to be of great value The harmless character of the serum was also established by the injection into men of 200 c c in twenty-four hours, without the experience of any inconvenience The Klemperers advanced the theory that during the course of pneumonia there is developed in the blood a poisonous albumin called pneumotoxin, and that the system elaborates an antipneumotoxin, this latter substance causing the crisis They were able to demonstrate the presence of the antipneumotoxin in the blood of pneumonia patients after the crisis, and they also succeeded in curing the disease in animals by the use of antipneumotoxin

NATURE

Vaughan considers that the action of the serum is antimicrobic and not antitoxic McFarland says the nature of the serum is uncertain, it may be antitoxic or antimicrobic probably antimicrobic Lambert considers that it may be bacteriolytic in its action

A H Smith says whether the antitoxin is the product of the pneumococci or is simply the result of changes going on in the leucocytes, preparatory to their disintegration, is not yet determined Smith also cites an observation of Pinna that the pus obtained by injecting turpentine into the cellular tissue of a man the pus being proved absolutely sterile, had the power, when injected into rabbits, of rendering them immune to inoculations with pus containing pneumococci, though the unprotected animals inoculated in the same manner died of pneumococcus septicemia within thirty-six hours Smith adds "It would appear from this that the pus itself, apart from any microbic action, possesses antitoxic properties"

Tizzoni claims that the serum is not only protective against the pneumococcus, but that it protects against reaction to small fatal doses of the tetanus bacillus, while on the other hand the tetanus serum renders the animal less susceptible to pneumococcus infection, and McFarland cites an instance where it protected against the streptococcus

It may safely be concluded that antipneumotoxin is not a bactericide The pneumococcus is not killed by contact with it Instead the organism multiplies, de-

* Read before the Denver and Arapahoe Medical Society, Feb 12, 1901

velops, and retains its virulence under these conditions On the other hand, the antipneumococcic serum, when injected into animals, prevents the development of symptoms due to the formation of pneumotoxin If pneumotoxin alone be injected into a rabbit it causes rise of temperature, toxemia and death from general pneumococcus septicemia but if the pneumotoxin be mixed with antipneumococcic serum and injected no rise of temperature nor other symptom develops It is probable therefore that the serum does not prevent the development of pneumotoxin, but that it either renders the pneumotoxin inert through chemical processes or else it counteracts its effects

PREPARATION

Some experimenters have used a glycerin extract of the muscles and viscera of immune animals Others have obtained the serum direct from different animals That the different methods of preparation influence the result to some extent is proved by the observation of Lara who stated that the serum from dogs caused nervous excitement while that from rabbits produced general agitation and a temporary aggravation of the disease It is therefore important to determine what method is used in the preparation of the serum employed, in order to properly interpret the effects reported

Washbourn used essentially the same method as that employed in producing diphtheria antitoxin A pony was inoculated with cultures of the pneumococcus for three months At the end of this time the animal was found to possess marked immunity In order to increase the virulence of the pneumococcus Washbourn devised a special method of culture and kept the culture in an incubator at 37 5 C for sixty-six days, and he states that the serum may also be accurately standardized

McFarland states that the same process applies to the manufacture of the antipneumococcic serum as applies to the manufacture of diphtheria antitoxin, except that it is necessary to cultivate the pneumococcus by a special method He first injects virulent bouillon cultures which have been killed by heating to 60 C for one hour After the horse has stood injections of increasing doses, living cultures are given in increasing doses until the horse no longer reacts The protective character of the serum is demonstrated against living organisms injected into rabbits Then the horse is bled, the serum is treated with trikresol and in this shape it is put upon the market

REPORT OF CASES

Lara reported the results of 10 cases treated prior to Dec 2, 1892, 5 were cases of double pneumonia, 5 single, 8 were young persons, 2 were advanced in years, 6 were robust, 4 debilitated He employed different sera, in some cases using that from immunized rabbits, in other cases from dogs, and in still others the glycerin extract of the viscera, no local reaction followed any injection The rate of the pulse was unchanged, but its character was altered There was no immediate change in respiration, but after a time it became slower In every case the crisis occurred from the third to the fifth day, convalescence was rapid and complete and the complications were rare and of little gravity In all but three cases reduction of temperature followed the injection Lara was encouraged by the results

Oct 31, 1896, De Renzi reported 16 cases 2 of whom were treated in 1894-95, both recovering During 1895-96 12 recovered and 2 terminated fatally Feb 27, 1897, Washbourn reported 1 case of his own who recovered and 1 case of Pye-Smith, also with recovery April 18, 1897, Spurrell reported 1, the patient dying May 22, 1897, A Cooke reported 2 cases, both of whom recovered

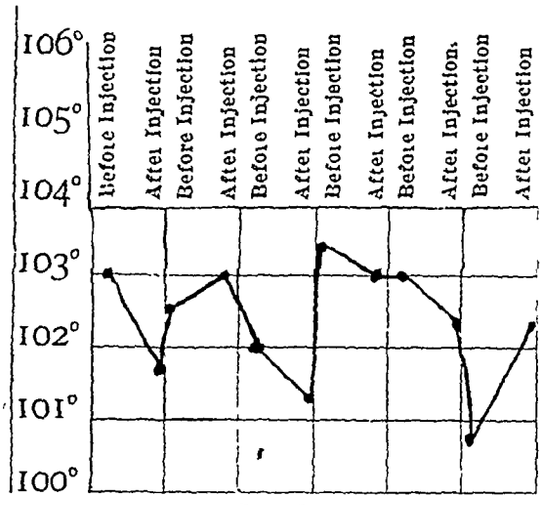
On the same day Harnett reported 1 in an alcoholic, terminating in recovery Dec 25, 1897 Washbourn reported 6 cases, all terminating in recovery Jan 30, 1898 Pane reported 9, of whom 8 recovered and 1 died He stated that in the 8 patients who recovered, rapid improvement followed the use of the serum, and there were no ill effects During 1898 De Renzi reported 10 additional cases, all of whom recovered Feb 15, 1898, Weisbecker reported 21 with 19 recoveries and 2 deaths He stated that the results were most striking, there being a notable change for the better in the patient's general condition Of the 2 fatal cases, 1 was due to emphysema and the other patient was 78 years old May 7 1898, Fanoni reported 1 case treated with De Renzi s turkey serum, with recovery In October, 1898, Marsalongo and Franchini reported 10 cases with 7 recoveries and 3 deaths the three fatal cases being alcoholic subjects Aug 26 1899, Fanoni reported 5, with 4 recoveries and 1 death The fatal case was a female patient, and her death should not really be attributed to pneumonia as she was in full convalescence when pericarditis or endocarditis developed, causing her death In March, 1890 Canby reported 4 cases, all of whom recovered 1 being his own case, 1 a patient of Dr Frey and 2 patients of Dr Everhart April 14 1900 Lambert reported 12 cases of his own, with 9 recoveries and 3 deaths, he also quotes Bozzolo as having treated 5 with 4 recoveries and 1 death Lambert's experience with Pane s serum was unfavorable but he states that this was probably due to the fact that the serum was old he then substituted serum from horses and had better results He states that the serum does not seem to have any effect on the process in the lungs nor to hasten the crisis but that in certain instances it does prevent the development of a pneumococcus septicemia, and in these cases it may save life Sept 8 1900, J C Wilson reported 18 patients treated at the German Hospital, Philadelphia, the usual treatment at the hospital being given simultaneously 2 were women and 16 men, the youngest was 15, the eldest 48, all were working people and most of them were occupied up to the time of the attack Of the 18 patients, 14 recovered and 4 died Wilson used small doses at first but later increased the amount given He calls attention to the great increase of leucocytes following the injection of the serum In the discussion of this case A O J Kelly reported 1 of double pneumonia treated with the serum terminating fatally, but he states that the case was considered hopeless when the serum was begun, and that the supply of serum gave out some time before death ensued He also states that marked increase of leucocytes followed each injection McFarland reports, during the year 1900, among others, 1 patient treated by Rochester, with recovery

The cases which I report were all treated at the Arapahoe County Hospital, during the fall of 1900 Other treatment was employed simultaneously, consisting of ice-pack to the chest, strychnia, alcohol and digitalis as needed and oxygen in desperate cases

CASE 1—R C, a white laborer 45 years old was admitted Sept 26, 1900, with acute alcoholism and pneumonia of the right upper and middle lobes, it being the eighth day of his illness He had been without medical attention up to the time of his admission The affected lobes were found consolidated On September 27, the ninth day of the disease, serum treatment was begun 20 c c being given subcutaneously every eight hours

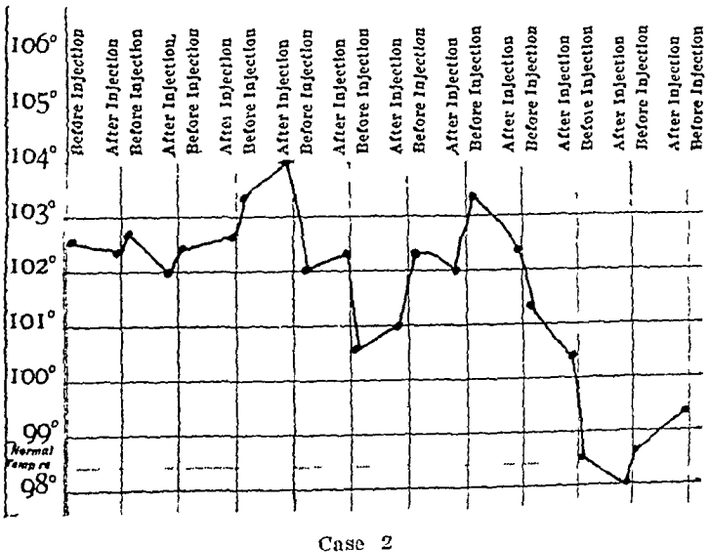
Unfortunately the supply of the serum gave out, there being no more in Denver at the time so that he had but six doses, the last being administered the morning of September 29, the patient died the morning of September 30 Later arrangements were made for a systematic test of the serum, and it was administered to every pneumonia patient admitted to my service from October 25 to November 25 regardless of the general condition of the patient or the stage of the disease, 20 c c of Mulford's serum being given subcutaneously every six hours

CASE 2—J C a white teamster aged 39 was admitted Oct 25 1900 the second day of the disease His family history was negative, and he gave a personal history of pulmonary hemorrhages in 1883 The right upper lobe was consolidated Serum was begun October 26, the third day of the disease He received eleven doses of 20 c c each at intervals of six hours The crisis occurred the fifth day of the disease and convalescence was rapid



Case 1

CASE 3—F, an insane man about 50 years old had a chill and severe sharp pains in the right chest during the night of November 3 He was transferred to my service and I saw him the morning of November 4 There was slight dulness and diminished respiratory sounds over the lower right lobe

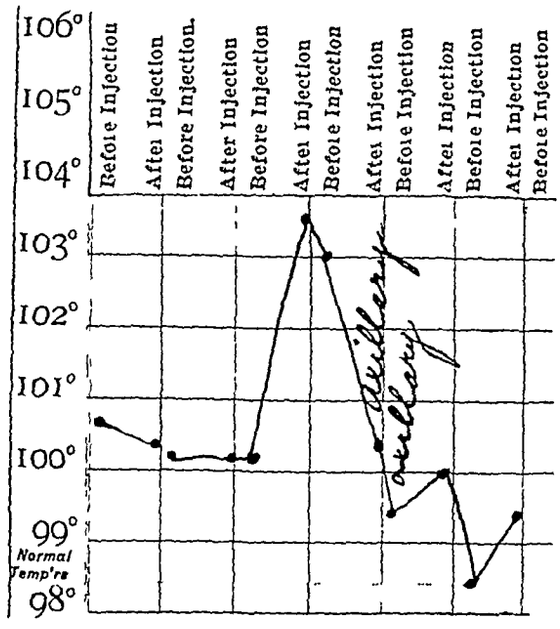


Case 2

The next day there was increased dulness with bronchial breathing The serum was begun during the first twenty four hours of his illness, and he had six doses of 20 c c each The crisis occurred the third day and convalescence was rapid

CASE 4—M St C, a negro woman 19 years of age, a morphin habitue was admitted November 11 Because of the unreliable character of her testimony no history could be obtained I first saw her on November 12 Both lower lobes were consolidated, with flatness tubular breathing and exquisite pectoriloquy She had fourteen doses of 20 c c each, at intervals of six hours this treatment being begun the day of her admission The crisis occurred the fourth day she was in the hospital, though it was not typical, and there were some fluctuations of temperature thereafter She made a good recovery

CASE 5—T G, a white woman 18 years of age, with constitutional syphilis, was admitted November 19, the fifth day of the disease The right lower and middle lobes were consolidated The serum was begun the fifth day of the affection

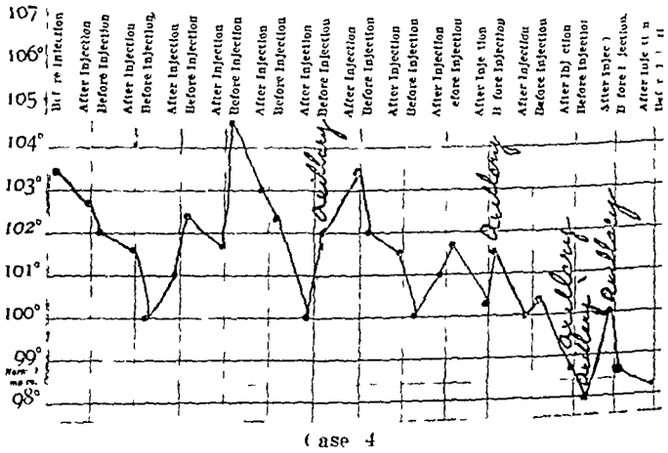


Case 3

and she had twenty doses No crisis occurred A septic arthritis developed affecting the left elbow, and she was transferred to the surgical ward At this time she had practically recovered from her pneumonia but I saw her about six weeks later and discovered evidence of softening of the right lung

CASE 6—J B a white male cook aged 22, was admitted November 21 the 5th day of the disease The lower left lobe was consolidated Serum was begun at once and he received eight doses of 20 c c each The crisis occurred the sixth day of the disease and convalescence was speedy

The appended charts show the effects of serum on the temperature Aside from any objective symptoms there was lessening of dyspnea, and often the patient dropped into a comfortable sleep after the injection

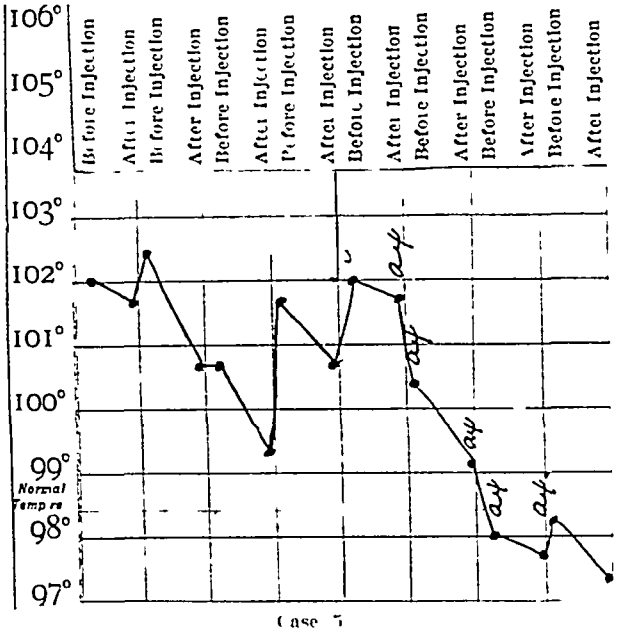


Case 4

In no case did a general toxemia develop In one case (No 5) there was considerable local irritation at the seat of injection

It will thus be seen that I have collected, including my own, 141 cases treated with antipneumonic serum of some sort, with 121 recoveries and 20 deaths, a mortality of 14 18 per cent In those cases where I have had access to the original report, I have especially studied the fatal cases Weisbecker had 2 deaths, one being emphysematous and the other 78 years old Marsalongo and Franchini had 3 deaths all alcoholics

Fanoni had 1 death, but it was from cardiac disease after convalescence was fully established Of Lambert's fatal cases 2 were alcoholics Of Wilson's 1 died on the third day, the entire right lung being solid, 1 had been ill with la grippe for two weeks 1 was an alcoholic, the left lung being entirely solid and death occurred on the fifth day the other patient weighed 200 pounds and was addicted to malt liquors Kelly had 1 death but in an alcoholic considered hopeless before serum was



Case 5

administered, and the supply of serum gave out before death My one death was in a patient with acute alcoholism, no treatment at all being instituted until the eighth day

In attempting to estimate the effects of the serum most, if not all the cases just mentioned ought really to be excluded If these be excluded we have 127 cases

corroborative evidence of the value of the serum Unfortunately in my case no blood counts were made

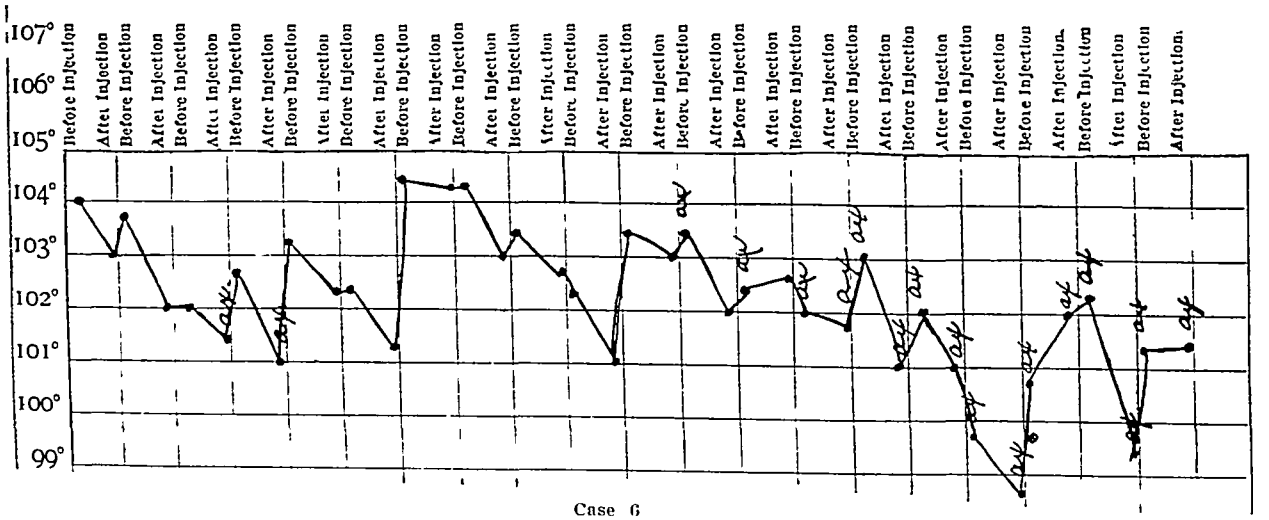
I have found no statement of the effects of the serum on the chlorids in the urine It is to be hoped that subsequent observers will study this also

The thing which most impressed me during my observation was the complete absence of toxemic symptoms If it be true as is claimed that the pneumococcus enters

REPORT OF CASES TREATED WITH ANTIPNEUMONIC SERUM

Bibliography number	Reporter	Number of cases	Recovered	Died	Remarks
22	Lara	10	10	0	
22	Bozzolo	[illegible]	4	1	
8	De Renzi	16	14	2	
12	Washbourn (& Pye Smith)	2	2	0	
10	Spurrell	1	0	1	
9	Cooke A	2	2	0	
11	Hartnett	1	1	0	
12	Washbourn	6	6	0	
14	Payne	9	8	1	
4	De Renzi	10	10	0	
15	Weisbecker	21	19	2	One had emphysema the other was 78 years old
13	Fanoni	1	1	0	
16	Marsalongo and Franchini	10	7	3	All 3 who died were alcoholics
17	Fanoni	[illegible]	4	1	Death due to heart disease after convalescence
20	Canby (Tyerhart & Frey)	4	4	0	
22	Lambert	12	9	3	Two who died were alcoholics
2	Wilson J C	18	14	4	
2	Kelly A O J	1	0	1	Hopeless before serum was begun
6	McFarland (Rochester)	1	1	0	
	Tyler	6	[illegible]	1	Fatal case was a neglected alcoholic
		141	121	20	

the blood from about the third day to the fifth day of the disease and that prior to that time there are no pneumococci in the blood, and if it be true also that the advent of the organisms into the blood marks the beginning of the toxemia or septicemia, these facts furnish a rational explanation of the effects of the serum when begun early



Case 6

with 6 deaths a mortality of 4 7 per cent In view of the different sera used, especially when the difficulty of producing and keeping a good antipneumonic serum is considered this seems to me an excellent showing

Wilson, Kelly and others have called attention to the increase of leucocytes following injections of the serum As absence of leucocytes in pneumonia is considered of grave prognostic import this is good cor-

Osler mentions toxemia as *the* important prognostic factor and it is one of the most, if not the most important item in determining the outcome It is my opinion that if fresh serum in large quantities be given before the advent of the pneumococcus into the blood, it will prevent the development of toxic symptoms This also coincides with the results of animal experimentation Animals inoculated with the pneumococcus do not die

of pneumonia, but of pneumococcus septicemia, and as is well known, the results of animal experimentation are extremely encouraging

It is exceedingly doubtful whether antipneumonic serum has any effect on the condition of the affected lung The exudate is extracirculatory the vascular supply being cut off It is therefore almost inconceivable that the serum should have any effect on it, except possibly to prevent the involvement of new areas But if we have a serum which prevents and combats toxemia, as I believe we have, that is a great advance

Several problems of much importance yet remain to be solved The standardization of antipneumonic serum, so essential to accurate dosage, the easy cultivation of the pneumococcus in such a way as to prevent loss of virulence, the concentration of the serum to permit smaller dosage and the reduction in cost of production so essential to its popular use, all these are yet in the future

DISCUSSION

DR J N HALL—I saw all of the cases and in addition have seen one or two others notably one with Dr Holmes, which I report with his permission, a case where a pneumonia supervened upon an old standing phthisis, and in that case the result was fatal It was due, however, rather to the phthisis than to the pneumonia I have not as yet been convinced of there being any great therapeutic effect in this serum, still I think it is a lead which is well worth following I am rather prejudiced against the general proposition that the pneumococcic serum will be of much value, because of some preconceived notions, and yet I am open to conviction It is well known that pneumonia is not a disease uniformly due to the same organism Something like four fifths of the cases are due to the pneumococcus, while in the remaining Fraenkel's bacillus, the streptococcus and various other organisms are found In very many of the cases of la grippe pneumonia, as is well known a mixed infection is present We are in much the same position as regards pneumonia as we were in regard to diphtheria before the bacteriologic differentiation of the disease In those days we called all cases of false membrane in the throat diphtheria, whereas we now know that many of these are due to a streptococcus infection It is only in the diphtheria pure and simple that the diphtheria antitoxin is of much value If we had the means of knowing absolutely the bacteriologic diagnosis in our cases of pneumonia, we should have a better opportunity for estimating the true value of the pneumococcic serum As in the use of streptococcic serum in puerperal fever, it is essential that we should know the exact organism causing the symptoms before we can hope to form just estimate of the value of the remedy

I have seen within six days six cases of diphtheria and three of streptococcic sore throat all having much the same clinical appearance Before the days of the use of the diphtheria serum, if such a thing were possible as that the remedy could have been injected, we should have been completely mystified because of the good effect which it had on certain of these cases, and the absence of any effect in others Therefore, as I say, I do not feel that we can very justly estimate the value of this serum, because we can not tell how many out of the 141 cases reported by Dr Tyler were due to a pure pneumococcic germ It is perfectly possible that all of these that recovered were due to that In that case we should have a very high estimate of the value of the serum, and we should be all the more diligently led to study to find a serum which we may use for the other cases

Furthermore, we should bear in mind that in pneumonia it is more difficult to give an exact prognosis than in almost any other disease We occasionally see patients who, by all rules of prognosis ought to die, and yet they recover In the report which I made a few years ago before this society, of all the cases of acute lobar pneumonia which I had seen in private practice, every patient over 70 years of age much to my surprise, had recovered A week ago I saw, with Dr Hawkins, a case in a young woman so desperately ill that we both agreed that her prognosis was entirely hopeless She had not been treated with the vigorous stimulation which we commonly use in these cases, yet when it was adopted she promptly recovered, being out of danger in forty eight hours Where such cases as these quoted may be seen, the difficulty of prognosis is evident Finally, there is sufficient encouragement in the use of this serum to lead us to strive more diligently than ever to find a treatment of the disease which, with more accurate bacteriologic diagnosis, shall give us such results as we have already seen in the treatment of diphtheria

DR A M HOLMES—Dr Tyler's subject is an important one I have had very little experience with the antipneumococcic serum, having used it in but one case The case referred to was by no means a favorable one for a test For several years the patient had been afflicted with phthisis Pneumonia developed after exposure and had been in progress for several days when I first saw him Dr Hall was kind enough to see the patient with me As a last resort we decided to make use of the antipneumococcic serum, and we had an opportunity to carefully observe the effects I should like to report a few points, many of which closely resemble those reported by Dr Tyler Other means of treatment were used in addition to the serum, oxygen being administered almost constantly Wild delirium was present accompanied by rapid pulse and very little fever We injected 20 c c of antipneumococcic serum at intervals of four to eight hours We observed improvement in the pulse, in the respiration in the delirium and the restfulness of the patient soon after giving each injection, but the improvement was only of short duration, the case terminated fatally at the end of one week after we began the serum A bacteriologic examination of the sputum was made when we first saw the patient, numerous pneumococci, tubercle bacilli and other germs were found Several days after we had been giving the serum another examination of the sputum was made and the pneumococci were not found, but the tubercle bacilli were present The blood examination revealed a slight increase in leucocytosis which soon diminished There were no bad effects that could be ascribed to the serum The patient himself frequently remarked that he felt better after receiving the injections When administering antipneumococcic serum it should be fresh be commenced early in the course of the disease, and be given in large doses and at short intervals From my limited experience I am of the opinion that antipneumococcic serum possesses sufficient worth to justify further use

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HOW TO TREAT MUSCULAR AND JOINT SPRAINS OF RAILWAY EMPLOYEES *

HALDOR SNLVE M D
CHIEF SURGEON CHICAGO GREAT WESTERN R R
ST PAUL MINN

Joint and muscular sprains differ so far as I know, not the slightest from the same affections in other occupations, but the same justification that obtains in calling railway surgery a special branch of surgery will allow of the use of the title of this paper Sprain of some sort or another is a very common accident among railway employees This is perhaps due to the fact that so many of them in the discharge of their duties are forced to run backward and forward work on machinery in constrained positions do heavy lifting and are exposed to falls from heights In order to form an idea of how frequently such accidents affect railway employees I have prepared a table of the sprains and strains of all kinds, reported as such to my office occurring on the lines of the Chicago Great Western for the year 1899

SPRAINS AND STRAINS OF CHICAGO GREAT WESTERN R R EMPLOYEES 1899

Firemen

CHARACTER OF INJURY	No	CAUSE OF INJURY	No
Thumb	2	Falling down	17
Wrist	4	Shaking grates	3
Shoulder	4	Muscular exertion	3
Lumbar	5	Collision	1
Foot and ankle	2		
Knee	2		
Hip and thigh	3		
Forearm	1		
Side	1		
	24		24

Brakemen

	No		No
Shoulder	3	Arm twisted	1
Knee	2	Muscular exertion	1
Arm	1	Falling	7
Elbow	1	Turning foot	2
Foot and ankle	5	Lifting	2
Lumbar	2	Collision	1
	14		14

Engineers

	No		No
Lumbar	5	Switching	1
Wrists	2	Wreck	1
Leg	1	Falls	5
Elbow	1	Arm Caught	1
Thumb	1	Collision	1
		Tank tipped	1
	10		10

Section Hands

	No		No
Inguinal region	1	Struck stove	1
Foot and ankle	2	Falls	4
Abdominal muscles	1	Collision	2
Wrists	3	Turned foot	1
Knee	1	Lifting	2
Neck	2		
	10		10

Miscellaneous

	No		No
Knee	2	Falls	18
Wrist	6	Muscular exertion	2
Side	2	Scuffling	1
Ankle and foot	13	Caught foot	1
Lumbar	6	Lifting	2
Leg	2	Turning foot	5
Finger	1		
	32		32

It will be seen from the table that, as far as occupation is concerned, the greatest number injured, strangely enough, were firemen to the number of 24

We would have expected *a priori* that the number of sprains would have been greatest in the brakemen, who are continually climbing over cars and running backward and forward along the train, but the number of these so injured was only 14 Next were engineers and section hands, 10 each, and finally all other occupations, switchmen machinists, wipers, carpenters, etc, to the number of 32 making a total of 90 cases reported to my office as sprains or strains, out of a total of 622 accidents for the year 1899 The percentage of sprains and strains to the total is 14 45

The character of injury in all these cases has been sprains or strains of fingers, wrist-joints, shoulder-joints, foot and ankle, knee, hip and thigh, arm, back and side By far the largest number of sprains reported were of the ankle and foot 22 cases out of 90 Wrists were sprained 15 times In all the cases of strains, by far the greatest number were of the back, or, as I have tabulated it, of the lumbar region, a total of 18 cases It appears that engineers hurt their backs, brakemen their ankles while the firemen sprain backs, wrists and shoulders indifferently

The cause of injury shows a preponderating number due to slipping and falling, resulting in injuries to the wrists and ankles especially The total number of cases due to falling is 51 Various sorts of muscular strains resulting from muscular exertion were present in 9 cases

The percentage of sprains and strains in a total of 622 cases being 14 45 these are therefore frequent accidents among railway employees, and six years of experience in railroad work leads me to believe that these are precisely the injuries which lay up the employees the greatest length of time, and the object of this paper is to show how the time of recovery can be shortened, in my opinion at least 50 per cent

What do we mean by sprain? The definition of Dr Douglas Graham is a very good one "A sprain is a sudden partial displacement of two joint surfaces followed by immediate replacement" A strain is a stretching of the tissues beyond their normal limits, resulting in rupture of some of the tissue elements These strains may affect any of the tissues, but do not, in my opinion, ever occur in ligaments

Dr P S Conner, Cincinnati, teaches that ligaments are made up of white fibrous tissue which is absolutely inelastic and therefore can not stretch, at the same time it is so strong that it is easier to pull it from its attachments in bone or muscle—tendon—than to rupture it A writer in Gerrish's Anatomy says that a little reflection will teach us that if tendon could stretch then our muscular efforts would be wasted on the elasticity of the medium between muscle and bone Morris' Anatomy also teaches that white fibrous tissue is incapable of stretching I mention this particularly because the term "stretching of the ligaments," especially as applied to the ankle-joint, is used so frequently and so loosely In a very few instances postmortems after

* Read at the annual meeting of the Academy of Railway Surgeons held in St Paul Minn Sept 5 and 6 1900

injuries of joints have been made which would seem to indicate that ligaments can rupture, but experimental work has shown that it is easier to pull off a scale of bone at the attachment of the ligament than to rupture the ligament, i e in ligaments other than thin fascial expansions, and I believe, owing to the absence of elasticity in the ligament and its great strength, that such accidents as rupture almost never occur Therefore, when surgical writers speak of stretching and rupturing ligaments it means one of two things the stretching and rupturing of connective tissue, the areolar tissue, blood-vessels etc or it means the tearing off of a scale of bone at the attachment of the ligament involved The last is what generally occurs in very severe sprains of joints So much for the pathology

TREATMENT

From the earliest times war has been waged as to what constitutes the proper treatment of a sprain, especially as regards sprains of the ankle-joint On the one hand, there have been those who contend that what a joint needs after an injury is rest, and the more absolute this rest can be made the quicker recovery ensues The adherents of this idea elevate the limb affected, put it up in immovable dressings, and wait around until the rest and dressings have resulted in the disappearance of swelling, which requires from fifteen days to three months, then the patient is requested to walk around and use his leg so as to make it strong again If the patient has been laid up two or three months he finds himself unable to follow the surgeon's advice, as his limb is weak and walking painful and difficult What has occurred? We know that immobility of a joint induces passive inflammatory changes, leads to the disappearance of the synovial fluid and roughening and thickening within the joint On the muscles this so-called rest cure has produced atrophy and possibly contraction The fat and other tissues forming the pads around the ligaments and tendons have been absorbed, and we find a preternatural immobility in our joint

Adherents of immediate motion apply bandages or adhesive plasters and encourage their patients to get around immediately after the injury At the present time there is a large class who endeavor to skim off the cream of both contentions They keep their patients perfectly quiet for a few days with immovable dressings, and then advise massage and motion The results have been much better, as regards the time required for recovery and the strength of the limb, with the last-mentioned treatment, than with the so-called absolute rest treatment

To have a correct idea of how to handle these cases in order to promote speedy recovery, we should bear in mind the few points I cited regarding the pathology and, further, the surgical indications There are perhaps very few sprains of the joints which are not accompanied by contusion of the joint surfaces The tearing of the areolar tissue and the rupture of the small blood-vessels, results in a rapid painful exudative swelling and discoloration, for which the first surgical indication is rest, but the question immediately arises What is rest for these involved tissues? Ranke rinsed out the vessels of fatigued muscles with a normal saline solution, which immediately restored them to full vigor, the experiments of Zabludowski have shown that muscles exhausted by faradization could be restored at once by massage, Maggiora showed that massage of muscles fatigued by mechanical labor quickly restored them to normal function What do these experiments mean? They mean that the muscles are constantly functionating, even when a limb is immobilized, the muscles are in a state of tonic contraction, and fatigue simply means a heaping up of the waste products resulting from the work of the muscle cells, such as lactic acid, creatin carbonic acid, acid phosphates and perhaps toxins, and *rest for muscle means the getting rid of these waste products and the furnishing of new oxygen and new food from the blood* We know that immobilization produces atrophy and contraction of the muscles, and knowing what the physiology of muscular rest is, it must be plain to every one of us that rest does not mean to confine a limb in a dressing which does not permit of motion of the muscles On the contrary, rest for the inflamed, contused, torn and otherwise involved tissues does mean immobilization The next indication to be made is the antiphlogistic one How can we limit excessive leucocytosis and inflammatory exudation? The application of cold water and evaporating lotions fulfils these indications In cases where there has occurred a rupture of the attachment of the tendon or ligament with its scale of bone, practically a fracture an indication arises for the maintenance of a proper position in order to allow of union Now, how are we to fulfil all these indications for treatment, some of them which seem paradoxical, i e, both motion and immobilization? The muscles involved in every sprain should have motion all the time in order to allow muscular contraction to exert its pump action on the lymph-vessels which carry away waste products whose presence produces fatigue and pathologic changes

The contused joint surfaces should at the same time be immobilized, providing the contusion and laceration is very severe The index to the severity of such an injury will be found in the amount of pain and nausea experienced, and the amount of swelling Discoloration of the skin is not an index of the amount of injury We can elevate the limb affected, apply a wet cheesecloth to the swollen joint, and over this an ice-bag during the first few hours or days until we attain to the height of the inflammatory process resulting from the trauma Motion can at the same time be administered to the muscles passively, by means of massage which produces for these purposes precisely the same changes as active muscular action, and besides carries away the waste and inflammatory product in the lymph and venous blood In all sprains of moderate severity both massage and active use of the limb can be instituted immediately or after a few hours

In a case of the ankle we should apply an elastic cotton bandage firmly to the limb, or leave on the shoe in the case of the ankle, lacing it up, and encourage our patient to walk the sprain away On retiring, the patient can have massage treatments, and hot applications or a local wet pack The massage should be begun as soon as possible after the injury It should be administered by a skilled masseur and should consist of centripetal strokings and kneadings, and extremely light frictions and strokings over the inflamed area the last being designed to favor the centripetal circulation and the spreading out of waste products in the tissues so that they can be the more easily absorbed by the lymphatics

After the acute symptoms have subsided, hot applications are the best because they dilate the superficial vessels and promote local circulation, which assists in carrying away the inflammatory products Since fractures or displacements frequently occur in the region of the ankle-joint, and as the inflammatory symptoms are usually more severe in these cases we will at times

be forced to keep our patient quiet for several days, using ice-bags and massage, before we can put on the bandage or Gibney's plaster bandages, and put the patient on his feet It is astonishing to the surgeon how quickly the patient can get over the sprain if compression be put on the joint and the patient receives massage and gets about I know a recent case where the plaster dressings and rest were used in a sprain of the ankle and foot, where two years and six months were required to put the patient on his feet without crutches and appliances at his ankle and I feel sure that had this patient been treated properly along the lines mentioned in this paper only a few months would have been required at the utmost As it was he was in almost useless condition at the end of two years and three months The muscles of his leg were atrophied, there was too much motion at the ankle-joint, and the patient was fearful of putting his weight on his leg, and complained of getting tired quickly and of pain in the whole limb Systematic massage use and encouragement sufficed in a short time to remove all this disability In these old cases, besides the measures referred to, the use of the Scottish douche is good, that is hot and cold water applied alternately It is of great value in promoting recovery Swedish gymnastics, in the shape of active and passive movements of all the joints of the limb affected should be used, in conjunction with other measures In the vast majority of sprains of the ankle, the ambulatory treatment is very satisfactory The average time required for recovery will be from six to twelve days In 400 cases it was nine days (Douglas Graham)

A muscular strain of considerable severity will show to the palpating finger an elevation of ruptured muscular fibers In these cases a little gentle massage will promote speedy recovery In a vast majority of so-called muscular strains, there will be no elevation to be felt by the palpating finger, and in these cases the cold douche, and static electricity both for its local and mental effect, gives remarkable recoveries

To recapitulate 1 Ligaments are rarely if ever torn in so-called sprains and are never stretched 2 The pathology in the majority of sprains is a rupture of the areolar and connective tissue around the joint, and a contusion of the lining of the joints 3 Immobilization of muscles is not rest On the contrary, in all sprains the muscles should have passive exercise the first few hours, and days, and active exercise after that In the majority of cases active exercise should be instituted from the beginning 4 The plaster casts should not be used at all, even in cases where we have a fracture unless it be impossible to maintain a proper position of the joint 5 Hydrotherapy in the shape of ice applied over a wet cloth the first few hours, water in the shape of hot fomentations or in the shape of the Scottish douche, where we wish a stimulation, is of very great value 6 The counter-irritation of static electricity in conjunction with massage is the best treatment for a strain 7 The ambulatory treatment of sprains in conjunction with massage is to-day the best treatment

Statistics of Quebec Province—There has been evidently a marked falling off in the ratio of increase of the population in the province of Quebec during the last decade In the report of the board of health for the year 1900, the recorder of statistics estimates the increase in population between 1898 and 1899 only 2 5 per cent The large centers of population have gained most, but the aggregate for the whole territory being slight it would appear that in the rural districts here as elsewhere there has been possibly some local actual decrease

DIAGNOSIS AND SYMPTOMATOLOGY IN THE APPENDICITIS OF CHILDREN *

THOMAS H MANLLY, PH D, M D
Visiting Surgeon to Harlem Hospital Professor of Surgery in New York School of Clinical Medicine
NEW YORK CITY

So much has been published in medical literature of late on the subject of appendical inflammation, that it might seem but little remained pertaining to it to be further elucidated

The operative technique in its surgical management has nearly advanced to perfection, so that in properly selected cases, and utilized at the proper time, surgical intervention in skilled hands should be followed by only a very low mortality The greatest difficulty which confronts the surgeon is not so much how the operation shall be done, as the question of properly interpreting symptoms locating the precise seat of pathologic changes and appreciating the character of existing complications

THE GENERAL AND SPECIAL CHARACTERS OF APPENDICITIS IN EARLY LIFE

In 1827 Meher first accurately described the pathology of appendicitis and recommended the excision of the appendix *(Memoire et observations sur quelques maladies de l'appendice caecal)* [1] There was no echo to his publication until 1838, when the writings of Albus Dance and Meniere appeared Although these authors approved of radical measures they maintained that the primary seat of lesion was in the cecum, as is maintained to-day by Treves About 1888 the original observations of Sands Fitz, and Talamon appeared, with the brilliant achievements of McBurney which settled beyond dispute the fact that in the great majority of cases the original lesion is in the appendix and that this organ must be primarily dealt with On Friday, Dec 30, 1887, the late Prof Henry B Sands, of New York, performed the first operation for appendicitis successfully after having first correctly diagnosed the condition existing The patient was a male, 12 years old The case had first been diagnosed as one of perityphlitis He tells us that the child had indigestion, etc, and that there was no tumor [2]

Weir, in 1887 was able to collect but 15 cases in which laparotomy had been performed for perforated intestine, the appendix was the seat of perforation or gangrene in 4 of these, although it was not discovered until after death In 5 the appendix was found perforated, and removed, but all died [3]

Appendicitis presents practically the same sexual difference in early life as is noted later in the adult thus Jalaguier records 182 cases in his own practice, 4 were under 5 years, 42 from 5 to 6, 64 from 10 to 15, 25 from 15 to 20 There were 112 males and 70 females [4] According to Bamburger's table, the relative frequency as to age was Under 2 years, 2 cases, 15 to 20 years, 20 cases, 20 to 30 years, 32 cases, after 30 years 17 cases Fitz's table shows 20 months to 10 years, 22 cases, 10 years to 20 years, 86 cases, 20 to 30 years, 65 cases, after 30 years 55 cases Matterstock's table shows Under 2 years, 2 cases, 2 to 5 years, 10 cases, 5 to 10 years 25 cases, 10 to 15 years, 35 cases Gordon's table reads 2 to 5 years, 5 cases, 5 to 10 years 33, and 10 to 15 years 41 cases Bruns' table says 1 to 5

* Read by title in the Section on Diseases of Children at the Fifty first Annual Meeting of the American Medical Association held at Atlantic City N J June 5 8 1900

years, 3 cases, 5 to 10 years, 20, and 10 to 15 years, 12 cases [5]

It is curious to note that Dieulafoy, Bruns, and Faisans include heredity as a *cause appendicite familiare*

In New York City, in 1899 there were 299 deaths from appendicitis, of which 63, or more than one-fifth, were in those under 15 years old, viz 1 year, 1 case, 3 years, 2, 4 years, 4, 5 years, 14, 10 years 20, and 15 years, 22 cases With a population of about 2,000,000, and assuming that 25 per cent of it is under 15 years of age, the annual mortality would be 1 for every 7933

Medical literature records but few cases of appendicitis in very young children and infants, except those which have been operated on We have no data to show whether this disease ever occurs in the infant subsisting exclusively on the mother's milk, and there are but few cases recorded as occurring before dentition has begun or the infant has begun to masticate food However, there are cases recorded of very early operation for appendicitis with varying results The youngest patient operated on for appendicitis, on record, was one treated by Dr Thomas A Savage of New York, only 61 days old A large perforation of the tip of the appendix was found The infant sank the day following the operation [6] Weiss operated for the same lesion on an infant 20 months old, with general peritonitis and death [7] Mr Miller saw a case of appendicitis in an infant 19 months old The infant was at first costive and it was believed that he was suffering from follicular enteritis On the fifth day of illness Professor Broca was called in, and laparotomy performed, evacuating a large abscess and exposing a rotten appendix Good recovery followed [8] In reviewing my own notes on appendical cases seen in hospitals, in consultation and in my own practice, I find 67 cases under 15 years old 16 were operated on with 4 deaths, 5 were attended with advanced general peritonitis and died without operation Forty-two others were seen, 6 very severe cases in which operation was refused, of which 2 died Forty-six were of various types in which it was not believed that laparotomy was imperative, of these all recovered except two in tubercular patients under 9 years There were 41 males and 26 females, the youngest 3 years old, the abscess bursting through the umbilicus The ages were 3 to 4 years, 1 case, 4 to 5 years, 4, 5 to 10 years, 27, 10 to 15 years, 35 cases

With this experience of appendicitis in the young it is my conviction that although the causative factors remain obscure at this stage, as later, and the treatment should continue on the same general lines, there remains a wide difference in the diagnostic factors of the disease in childhood, and that its symptomatology, when anatomical deviations are absent is more complex and more indefinite than in later life Goodrich believes that children bear general septic peritonitis much better than adults He has had several cases of general septic peritonitis in children, and has not lost one of them, as an instance he cites the case of a boy who entered the Long Island Hospital with gangrenous appendicitis, the peritoneal cavity being distended with a sero-purulent fluid The appendix was removed, the peritoneal cavity washed with saline solution and "sewed up without a drain," rapid recovery following [9]

My own experience fully confirms this view Among the cases included in my own tables there were 2 of general peritonitis recovering One was in a girl of 7 years, in a desperate condition, the distal half of the appendix had sloughed off, the distended paretic bowel protruded through the cut, and sero-purulent fluid flowed out from every direction Shock was so great that no time was lost in systematic cleansing of the peritoneum Recovery, though slow, was finally complete The other patient was a boy of 5 years with acute general peritonitis following appendicitis The parents refused to permit an operation and, though a fatal prognosis was given, the little fellow made a good recovery I am unable to find any statistics bearing on the relative mortality of laparotomy in the child and adult, although for many important reasons it should be lower in the former than the latter Local complications should be fewer in early years, organic disease, senile changes or those constitutional or functional disturbances so common in middle or advanced age are not so frequent, moreover, it is well known that children bear the effects of pulmonary anesthetics with greater impunity than adults

DIAGNOSIS

The recognition of appendicitis should be easier during the early growth of the body than later

Anatomical Features—During the early childhood the pelvis is of narrower dimensions, evolution of the intestinal tract is incomplete, the large intestine is relatively smaller and all its segments are more mobile than after puberty The position of the cecum is more indefinite, as at this time its attachment to the iliac fascia is lax, and this permits of a considerable range of motion in various directions Jacobi has demonstrated how this species of enteroptosis acts as an aggravating factor in the constipation of infancy The abdomen in childhood is rarely invested by a deep layer of fat, and hence the caput coli when it has descended, lies superficially As growth advances and the body develops, defecation becomes less frequent and the strain on the colon, in consequence of its capacity, becomes greater, and its position more fixed and definite

Complications and Pathologic Conditions which May Obscure Diagnosis—As contrasted with the adult, the pathologic conditions which may be confounded with appendicitis or mistaken for it in the child are few in number The two most prominent are intussusception and tubercular peritonitis It is curious to note, however, that even in childhood we can not fail to appreciate the importance of a critical abdominal examination and a search for other conditions which may in many respects, in the child as in the adult simulate appendicitis For example, at the British Medical Association's meeting held in July, 1898, Dr J Cromby reported 18 cases of floating kidney in children The youngest child was 3 months old, the eldest 15 years, 16 were in females Tuffier records 3 similar cases in children of 6, 9, and 10 years old [10] What Dr M L Harris, of Chicago, says of "Diagnosis of Abdominal Tumors" particularly applies to children in whom complex pathologic states are not yet in evidence He observes "Our knowledge must not be limited simply to normal anatomy, but we must know abnormal anatomy, or the anomalies to which the various organs are liable For instance, the liver may occupy the left side of the abdomen instead of the right, and the location of all other organs may be reversed as well The gall bladder instead of being retained against the inferior surface of the liver may be quite loosely attached to it, and thus possess quite a range of motion The liver may possess 'accessory' or 'Schnur' lobes, which may appear as distinct tumors There may be but one kidney instead of two, or the two may form a conglomerate organ

occupying the median position, or a kidney may occupy any location from the normal to the hollow of the sacrum and may be fixed or freely movable The intestinal tract is subject to numerous anomalies The cecum and appendix may be found near the umbilicus or up under the liver or they may be arrested at any point in their descent from the liver to their normal location in the iliac fossa The appendix may dip into the pelvis lying against the uterus or the ovary and tube, or it may be extra-peritoneal, its tip reaching up to the kidney The ovaries instead of occupying the lesser pelvis, may be retained in the lumbar region or descend into the labia The uterus may be double instead of single and each half may vary in its degree of development These are but a few of the anomalies which one must ever bear in mind when considering the diagnosis of abdominal tumor and often an anomaly of location or development will lead to a correct solution of a case which would otherwise remain unsolved [11]

Halle and Bernard[12] record a case of peri-nephritic abscess in an infant 18 months old The mass was in the right side and was at first believed to be a case of encysted peritonitis with atypical appendix Through the mistake in diagnosis, the author tells us they made the incision for evacuation too far forward, and soiled the peritoneal cavity by the escape of pus into it Menard cites the case of a girl 10 years old who was suddenly seized with lameness in the right lower limb from what was regarded as coxalgia in the beginning As the case presented complex features and the limb was exquisitely sensitive, an anesthetic was given, before a critical examination was made Then a mass was discovered deeply lodged in the right groin A free incision was made into it a large abscess opened and a necrotic appendix exposed Recovery was rapid, with complete disappearance of all lameness

Tubercular disease of the lumbar vertebræ is not uncommon in children, but the psoas abscess resulting in them usually follows the muscular sheath out under the crural arcade, however, Cathelin reports a case in which a psoas abscess was lodged in the right iliac fossa complicated with tubercular perforation of the appendix [14]

Umbilical abscesses in young children are most frequently of appendical origin One such case is recorded in my own group At first the thin scar tissue of the umbilicus pointed and broke, giving issue to a copious purulent discharge, the day after, fluid fecal matter appeared in the opening From the history of the case, the symptoms and the fulness which commenced at the border of the lowest rib and extended over centrally it was thought that the appendix was the primary source of the trouble and that from its perforation a fecal fistula had begun By a free incision the cecum was exposed, lodged high up and well forward After cautious manipulation the root of it was secured, doubly closed with silk ligature and cut through As the tissues were freely suppurating, a gauze drain was introduced Recovery was tedious, but from the day laparotomy was done, discharge at the umbilicus ceased

Wyeth records a somewhat similar case in a young man of 30 He died suddenly, of apoplexy On autopsy the perforated, rotten appendix was found lying free in the abscess cavity

Guiteras cites a case of abscess in a cystic terminus of the ureters, which have been diagnosed appendicitis Mr G W Wright published notes of a case of chronic intussusception of the appendix in a child 2 years old The tumor could be felt on a line with, and to the left of the umbilicus On incision, the root of the appendix was found invaginated into the cecum [16]

Genito-urinary disturbances may lead to mistakes in diagnosis when a large, deep, tense appendical abscess greatly stretches or compresses the ureter, or when it bursts into the bladder and leaves a fistulous opening, connecting one with the other Most perityphlitic abscesses drain directly into the colon, where the pus is carried off by the emunctories, but the course is sometimes by the vesical route, as occurred in a young sailor operated on by me two years after he first had appendicitis in the West Indies

Typhlitis, with or without perforation, a condition said to be not very uncommon in tubercular peritonitis presents practically the same physical signs as appendicitis, although some authorities allege that in tuberculosis perforations rarely occur except in the latter

THE MORE COMMON MALADIES WHICH PRESENT SEVERAL FEATURES SIMILAR TO APPENDICITIS

Tubercular Peritonitis—Tubercular peritonitis may be general or localized, when limited to the mesentery or parietal peritoneum, and when there is attendant paresis of the intestines or ascites it is quite impossible to affirm whether or not the appendix is involved Under these circumstances I have often seen an operation undertaken for appendicitis reveal no lesion of the organ The acute, fulminant type of peritoneal tuberculosis is said, in the majority of cases, to have its primary seat in the peri-appendical lymph tissues contiguous with the cecum

Intussusception—This condition is one which quite invariably belongs to early infancy Wiggin, Kelsey and Carpenter have recorded successful laparotomy for it in infants from 2 to 3 months old It is said to sometimes present several characters common to appendicitis when of the subacute variety The point of invagination is usually the cecum, the abdomen is distended and there is a tumor But the age of the infant, the evidence of strangulation and the bloody stools, together with the extreme rarity of the lesion should seldom leave much doubt as to its real character Fenger and Gerhards[17] record a case of appendicitis in an infant 7 weeks old, and Matterstock had seen it in one of 6 months, both presenting features in common with intussusception Gordon speaks of intussusception being more common in "1st infancy" before dentition, and says that appendicitis steadily increases in frequency from the 2d to the 15th year

Typhoid Fever—Typhoid in children is well known to pursue an atypical course, and occasionally may be mistaken for appendicitis Warren tells us that in those mixed cases presenting complex clinical features, we can not rely on Widal's test Diarrhea is not an uncommon concomitant of appendicitis and in both, iliac tumefaction and tenderness are generally present

Appendicitis with Appendical Invagination into the Cecum—This remarkable condition has been described by various writers Harrison cites a case of intussusception of the appendix with invagination in a child 4 years old [18] John Kidd, another in a child of 7 years, the greatest pain being over the umbilicus Dr S McGraw reported a case in a lad of 7, the condition lasting four months The head of the cecum and appendix were removed, recovery following [19] Other instances of this singular complication are recorded in Mr Greig Smith's work.[20] Intussusception of the appendix, with or with-

out ulceration or perforation, though anatomically of great interest, evidently presents no special definite points for diagnosis and if it did, its treatment would be on the same general lines called when laparotomy is performed for appendicitis All the cases on record occurred in young children

EXAMINATION OF THE BLOOD AS AN AID TO DIAGNOSIS OF APPENDICITIS

So far we have been able to derive but little if any assistance in the differential diagnosis of local or general disease, by examination of the blood microscopically, except, perhaps in paludal affections The presence of the leucocytosis, however, has been supposed by some to establish the evidence of pus formation in febrile conditions of the system But corpuscular count in my own hands has proved so indefinite and delusive as to have convinced me that it possesses no practical value whatsoever in suppurative lesions Not long since a noted member of the profession, in an obscure abdominal lesion, in a patient of mine, diagnosed a neoplasm of the spleen from the pronounced state of leucocytosis found on microscopic examination of the blood, but on abdominal section the greater part of the stomach was found destroyed by carcinoma, the spleen being entirely healthy Warren says that count in the average case of pus-tube or appendicitis shows from 15,000 to 30,000 white discs per cubic millimeter, he adds that it is not the product but the virulence of the infection which governs the count "The degree of leucocytosis is independent of the amount of pus, a felon may raise the count as much as an empyema"

PHYSICAL EXAMINATION OF THE PATIENT

The most reliable and definite source of information in the diagnosis of appendicitis is through exposure and critical examination of the abdominal walls This may be generally efficiently performed in the conscious state It may, however, possess indefinite value and lead to fallacious conclusions, if we fail to secure a full clinical history of the case and if we have not thoroughly analyzed all the symptoms before we proceed It goes without saying, that, in consequence of the thin abdominal walls and the absence of those organic maladies so often encountered in adults, especially females, this examination should be a comparatively simple matter in the appendicitis of a child in all its stages, and so it certainly is, though admitting this, yet when we bear in mind the immature stages of development and the different relations of the viscera we can understand how we may even here be led into error

SURFACE EXAMINATION

Inspection—It is well, in all examinations of the abdomen, to place the patient on a flat surface on the back, when this is expedient If the child is restless or intractable other means may be necessary The first thing we will notice in appendicitis is the flexion of the right lower limb, although Gibney the noted orthopedic surgeon, warns us not to attach too much importance to this alone, as we have it also in coxitis and psoas abscess We will have the same phenomenon in an over-distended bladder, when both limbs are drawn up

TYMPANITES AND INCREASED RESPIRATION

Abdominal distension in varying degrees is a common accompaniment of appendicitis in all its stages, but it may depend on other causes than intestinal paresis The physiologic character of the respiration is practically the same in both sexes in childhood In peritonitis the respirations are frequent and shallow, we will note that the movements of the diaphragm are restricted and that respiration is mostly thoracic

Manipulation, Palpation, and Percussion—Digital exploration of the abdomen is a most valuable resource Muscular resistance or rigidity is present in varying degree according to the location and extent of inflammatory changes In most cases distinct localized tumefaction is made out over the site of the diseased appendix Deaver notes that in some cases of hyperesthesia-abdominalis a tumor may be present, but it can not be delineated by palpation The full flexion of the thigh on the abdomen always materially aids in localizing the tumor by relaxing the abdominal muscles Dr Edebohls attaches great importance to the value of palpating in localizing the appendix in inflammatory conditions After a trial of this device, on the abdomen of several fresh cadavers, and those of patients about to be operated on, no single instance has ever come under my observation wherein definite location of the appendix was possible A general safe working guide for the approximate location of the appendix is where the lodgment of the tumor is best defined When the cecum is normally located this is at what is known as "McBurney's point"

Percussion—This is an important adjunct, but when the abdomen is meteoric and hypersensitive it may be impracticable without the employment of an anesthetic In cases of suspected fecal impaction or vesical overdistension, it is of the greatest importance

Deep Puncture—Deep puncture by the hypodermic or aspirating needle has been employed as an aid in the diagnosis of perityphlitic abscess, but it is not without danger and is not always reliable Haupt records the employment of puncture in 116 children's cases Pus was found but once, though on operation an abundance of purulent formation was exposed, in most all the cases Ten years ago a boy of 12 years came under my care for the treatment of appendical abscess In order to convince the parent that pus was present, I passed in, behind and below the cecum, a long exploratory needle This was at once filled with purulent material But the parents were obdurate and would not consent to an operation, and the boy made a good recovery without it About the same time, the late Dr John G Truax, in the Harlem Hospital service finding a very large inflammatory fulness in the right iliac fossa, with signs of appendicitis, passed in an aspirator needle, drew off a pint of fetid pus, injected the cavity with saline solution and then drew this off the patient making an excellent recovery

Rectal Evacuation—This may be utilized with advantage in many cases of appendicitis in early life By this route the examination is availed of for the special purposes 1 In order to determine the presence or absence of co-prostatis fecal impaction of the colon or rectum 2 In order to locate the site of the appendix or tumor and the extent of purulent accumulation

By conjoined manipulations under an anesthetic nearly any localized fulness below the umbilicus, in a child under 10 years, usually may be detected and its general characters appreciated

SYMPTOMATOLOGY

At the threshold of this phase of our study the questions arise "Is there a wide distinction in the general characters of the symptoms of appendicitis in the child

DEATHS FROM APPENDICITIS BOROUGHS OF MANHATTAN AND THE BRONX DURING DECADE 1890-1899 ARRANGED BY QUARTERS *

		Total	1 year	1 year	2 years	3 years	4 years	Total under 5 years	5-10	10-15	15-20	20-25	25-30	30-40	40-50	50-60	60-70	70-80	80-90	Colored
Year 1890																				
First Quarter	Males	12							1	1	2		2	2	3	1				
	Females	9	1					1			1	1	4	1	1					
Second Quarter	Males	18							3	2	1	1	4	1	3	3				
	Females	10							1		1	1	1		2		1			
Third Quarter	Males	17		1				1	1	3	4	2	3	1	1			1		
	Females	4									1	1	1		1					
Fourth Quarter	Males	13							2	1	2	1	3	2	2					
	Females	4								1	1			1	1					
Total	Males	60		1				1	7	7	9	4	12	6	9	4		1		
Total	Females	27	1					1	1	1	4	3	9	2	5		1			
Appendicitis 87 Suicides 239																				
Year 1891																				
First Quarter	Males	9								2	2	1	2	1	1					
	Females	5							1			2		1			1			
Second Quarter	Males	9							1	1			2	2	1		2			
	Females	7							1	1	1		1	1	1	1				
Third Quarter	Males	24							2	4	4	3	4	1	2		1			1
	Females	9			1			1	2	2			1	1	1	1				
Fourth Quarter	Males	10				1		1		1		3	2	1	2					
	Females	10							1		1	1		3	2	1	1			
Total	Males	52				1		1	3	8	6	7	10	8	6		3			1
Total	Females	31			1			1	5	3	2	3	2	6	4	1	2			
Appendicitis 83 Suicides 300																				
Year 1892																				
First Quarter	Males	18							3		1	3	2	3	2	3	1			
	Females	12							1	2	1	1	3			1				
Second Quarter	Males	17			1			1	1	2	2	4	4	1		1	1			
	Females	17							1	1	3	1	6	2	1	1	1			
Third Quarter	Males	27							2	5	1	6	5	1	4		2	1		1
	Females	11				1		1	1	1	1	2		1	1	2		1		
Fourth Quarter	Males	16								3	2	4	3	2	1	1				
	Females	11								2	2	2	1		1		2	1		
Total	Males	78			1			1	6	10	6	17	14	7	7	5	4	1		1
Total	Females	51				1		1	3	6	7	9	10	3	3	4	3	2		
Appendicitis 129 Suicides 249																				
Year 1893																				
First Quarter	Males	8									1		3	4						
	Females	5							1	1		2				1				
Second Quarter	Males	13								2	2	3	1	2	1	2				
	Females	13								1	2	2	2	3		2				
Third Quarter	Males	20								1	3	4	9		2					
	Females	9				1		1	1		1	2		1	1		2			
Fourth Quarter	Males	15							3	3	1	1	4	2	1					
	Females	4							1				1	2						
Total	Males	56							4	6	7	8	17	8	4	2				
Total	Females	31				1		1	4	2	3	6	3	6	1	3	2			
Appendicitis 87 Suicides 314																				
Year 1894																				
First Quarter	Males	14							3	2		1	3	2	3					
	Females	12							1	1		2	3	2	2	1				1
Second Quarter	Males	24				1		1	1	3	2	5	5	3	4					
	Females	6							1	2		1		1	1					
Third Quarter	Males	18							1	2	4	4		2	3	2				
	Females	13							1	2	1	1	2	2	2	2				
Fourth Quarter	Males	13								2	2	1	5		3					
	Females	17				1		1	3	3	2	2	2	4						1
Total	Males	69				1		1	5	9	8	11	13	7	13	2				
Total	Females	48				1		1	6	8	3	6	7	9	5	3				2
Appendicitis 117 Suicide 334																				
Year 1895																				
First Quarter	Males	26		1	1			2	4		6	3	3	2	1	5				
	Females	26							2	3	4	4	3	5	1	4				
Second Quarter	Males	24							1	2	2	5	8	5	1					
	Females	15							4			4	4	1	1		1			
Third Quarter	Males	40	2		1		2	5	8	4	4	4	4	5	5		2			
	Females	25					1		1	2	2	3	8	5	1	2				1
Fourth Quarter	Males	23				1		1	3	5		5	4		3	1	1			1
	Females	13							1	6		2	1	3						
Total	Males	113	2	1	2	1	2	8	16	11	12	17	19	12	9	6	3			1
Total	Females	79					1	1	8	11	6	13	16	14	3	6	1			1
Appendicitis 182 Suicides 376																				
Year 1896																				
First Quarter	Males	29				1		1	4		4	3	4	6	4	2	1			1
	Females	15							4	1	1	1	2	1	3		1	1		
Second Quarter	Males	31				2		2	3	4	2	6	5	3	1	3	2			
	Females	21			1			1	2	4	3	1	6			3	1			
Third Quarter	Males	38							5	6	4	5	4	8	4	1	1			
	Females	24							3	1	2	5	5	3	1	1	1			1
Fourth Quarter	Males	31								2	5	7	9	4	3	1				1
	Females	12							2	1	1	2	2	2	1	1				
Total	Males	129				3		3	12	12	15	21	22	21	12	7	4			2
Total	Females	72			1			1	11	7	7	9	15	8	5	5	3	1		1
Appendicitis 201 Suicides 384																				
Year 1897																				
First Quarter	Males	38		1				1	4	5	4	4	11	4	4	1				3
	Females	15							4				3	4	1	2	1			2
Second Quarter	Males	25				1		1	5	4	3	2	4	4	2					1
	Females	20							3	3	1	3	4	1	1	3	1			
Third Quarter	Males	35							4	8	3	9	2	2	3	2				
	Females	18							1	5	2	2	4		3	1				
Fourth Quarter	Males	27					1	1	2	6	1	3	3	8	1	1	1			3
	Females	15							1	3	1	2	2	3	2	1				
Total	Males	125		1		1	1	3	15	23	13	18	20	18	10	4	1			7
Total	Females	68							9	11	4	7	13	8	7	7	2			2

Appendicitis 193 Suicides 436

* The Bronx is a district on the North recently annexed to New York

Year 1898																				
First Quarter	Males	40							2	4	4	7	10	8	1	4				
	Females	24							1	1	4	7	3	3	1	3	1			
Second Quarter	Males	28			1	1		2	1	6	2	1	7	3	4	2				1
	Females	33							3	3	6	6	4	3	3	4	1			
Third Quarter	Males	42		1	1			2	7	1	3	7	8	9	3		2			2
	Females	27							5		2	4	4	6		3	2		1	
Fourth Quarter	Males	40							3	10	1	5	5	9	5	2				2
	Females	18								4	2	5	3	1		1	1	1		
Total	Males	150		1	2	1		4	13	21	10	20	30	29	13	8	2			5
Total	Females	102							9	8	14	22	14	13	4	11	5	1	1	
Appendicitis, 252, Suicides, 428																				
Year 1899																				
First Quarter	Males	35	1					1	3	1	4	7	8	5	1	3	2			1
	Females	29							6	3	2	4	8	3	3					2
Second Quarter	Males	59			1	3		4	4	8	6	9	13	5	9	1				
	Females	42				2		2		8	5	8	10	5	2	1	1			1
Third Quarter	Males	51				1		1	4	5	8	8	9	8	1	6	1			1
	Females	28							2	5	4	4	6	1	2	2		2		
Fourth Quarter	Males	35			1			1	3	6	4	6	6	2	6	1				
	Females	27							3	1	3	1	7	2	5	1	4			2
Total	Males	180	1		2	4		7	14	20	22	30	36	20	17	11	3			2
Total	Females	126				2		2	11	17	14	17	31	11	12	4	5	2		5
Appendicitis 306 Suicides, 400																				

DEATHS FROM APPENDICITIS, NEW YORK CITY, YEAR 1899, ARRANGED BY QUARTERS *

Year 1899																				
First Quarter	Males	54	1			1		2	4	3	7	9	11	7	5	4	2			1
	Females	39							6	4	2	7	11	3	3	3				2
Second Quarter	Males	78			1	4		5	6	10	8	11	18	7	10	2			1	
	Females	59			2	2		4	3	9	7	11	15	5	3	1	1			1
Third Quarter	Males	80				1		1	7	11	12	11	12	14	2	7	2	1		1
	Females	43							5	7	5	7	9	2	3	2	1	2		
Fourth Quarter	Males	53			2			2	4	10	4	9	10	3	8	2	1			1
	Females	36							6	21	17	27	45	13	14	7	6	3		5
Total	Males	265	1		3	6		10	21	1	3	2	10	3	5	1	4	1		2
Total	Females	177			2	2		4	20	34	31	40	51	31	25	15	5	1	1	3
Total of both sexes		442	1		5	8		14	41	55	48	67	96	44	39	22	11	4	1	8

* Manhattan and Bronx Boroughs

Estimated population Greater New York, July 1, 1899, 3,550,053

Estimated mean population of New York (present boroughs of Manhattan and Bronx), for ten years 1890 1899, inclusive

1890	1,612,559	1895	1,879,195
1891	1,659,654	1896	1,934,077
1892	1,708,124	1897	1,990,562
1893	1,750,010	1898	2,048 830
1894	1 809,353	1899	2,117,106

Estimated mean population of Manhattan and The Bronx since consolidation

	1898	1899
Manhattan	1,911,755	1 953,569
The Bronx	137,075	163,537
	2,048,830	2 117 106

and the adult?" Is the disease so much more common in early life that we should be on the alert for it when painful abdominal symptoms suddenly set in? Has appendicitis a large mortality in childhood? We certainly have reason to believe that various innocuous types of typhlitis and appendicitis are very common in early life, but though there is at this stage an absence of many complex pathologic conditions found only in the adult, which give rise to symptoms similar to cecal implication, here even in childhood and infancy there are numerous diseased states that in their general features and most pronounced symptoms are quite identical with appendicitis

STATISTICS

In order to determine the relative mortality of appendicitis at the different stages of life I requested Dr R S Tracy, the registrar of records in the Health Department of New York, to provide me with data under this head Below are the figures very kindly supplied by him These tables include all the cases of appendicitis ending fatally in New York City, and the annexed district north, in the ten years preceding 1900 There were in all 1637 deaths, in children under 5 years, 218 cases, 1331 in children under 15 years, 375 cases, 22 90 Just before these appended tables were prepared for me, the question of prophylactic appendectomy was discussed in the *St Louis Medical Review*, when I was able to show that the annual number of deaths from suicide in New York was greater than from appendicitis

CONSTITUTIONAL AND LOCAL SYMPTOMS

Richardson has said that "the presence of acute appendicitis is rightly regarded as easy to determine as there are few diseases which have so uniform a set of symptoms" This statement is no doubt correct in typical cases, but if it be intended to apply to many of the complex forms seen in childhood, it will not hold

The dominant symptoms, fever and colicky pains are very common in many maladies of infancy and childhood Holt has called attention to the frequent presence of severe epigastric pain from hepatic or splenic congestion in malaria of early life All know how common painful disturbances are along the intestinal tract, from worms—ascarides and lumbricoides—in children Recently, Frazer reported a case of appendicitis in which the appendix was found filled with oxyurides vermiculares The patient was 2 years old [22]

Tuberculosis of the intestinal tract, its serous investment or its lymphatic glands in the inflammatory stages, is attended with pain varying in intensity and location Its usual site is the hypogastrium, although sometimes the area of hyperesthesia will be found over the site of pathologic changes in the tissues Dysenteric and diarrheal diseases in childhood and infancy are quite invariably attended by spells of severe pain These conditions may precede or accompany appendicitis of a severe form in young children Griffith in recording two successful operations for appendicitis in two patients 3 and 4 years old, respectively, says that in both there was a marked distension of the abdomen with a dysenteric diarrhea [23] The constitutional symptoms of acute appendicitis are quite identical with those of peritonitis, in fact, in nearly every well-marked case of appendicitis the peritoneum is involved Pain, fever, thirst, vomiting, a quick pulse with great prostration, warn us that some serious pathologic condition is in operation, involving parts invested by the peritoneum The paretic intestine and bladder contribute toward abdominal distension The spread of infection up through the parietal investment extends into the muscles and all the overlying tissue Muscular rigidity and free edema along the lateral plane of the abdomen, in peritonitis is one of the consequences

Despine says that the inception of the septic form is more insidious in the child, and so the disease is

more redoubtable This author also alleges that perforation is here more common than with the adult Acute severe appendicitis often begins with the symptoms of mechanical obstruction of the intestine, although in some cases of interstitial tuberculosis the same phenomenon may obtain Quenu records such a case, in which the first symptoms pointed to occlusion and the second to appendicitis [24]

That the premonitory symptoms of appendicitis in the child are more subtle and insidious than in the adult is lacking in support Richardson, speaking of the symptoms in general, says that "pathological processes, ulcerative, etc, may go on without symptoms until the peritoneal coat is involved" This is entirely in accord with our own experience in the adult, and is just as commonly as with the child [25]

Neither does our experience justify the assertion that the malady is more grave in the child or that when gangrene occurs in early life pain abruptly ceases When we are in doubt as to the interpretation of symptoms in appendicitis when seen early, says Talamon we may often delay from four to five days, when peritonitis will be present Breton notes the occasional absence of pain in atypical appendicitis of children, as is sometimes seen in adults [26]

Dieulafoy, a noted clinician of great experience, is emphatic in pronouncing all well-developed cases of appendicitis in children as being exceedingly lethal He says, the physician should note the symptoms with caution and make no delay in calling for surgical aid [27]

ON THE RELATION OF SYMPTOMS TO PATHOLOGIC CONDITIONS

Symptoms in disease are Nature's monitors, to warn us of the presence of lethal processes in the economy They usually bear a comparatively definite relation to the extent and to the character of pathologic changes in operation

There have been many attempts at the classification of the various types of appendicitis by several authors, and it has been alleged that each is usually manifested by a fairly uniform group of symptoms But while such a consummation is something most earnestly desired, we are yet very far from it There are but three phases of appendicitis which, by either signs, symptoms or diagnostic evidence, can be established with any reasonable degree of certainty These are

1 *Acute appendicitis or peri-appendicitis in its congestive or plastic stages,* beyond which the great majority of cases do not advance, particularly in early life The pericecal tissues share freely in the pathologic changes here There is a well-defined iliac tumor with *peritonisme,* the knee is drawn up and the patient walks with a stooped and painful gait There has been a large plastic effusion in the pericecal tissues, the vessels are highly engorged and lymph is freely transuded There is a sharp but transient reaction of the constitution in a vigorous patient, but struma, syphilis, tuberculosis or malaria will protract it

In this class we should see to it that the colon is well cleaned early by enemata as a free alvine evacuation will often reduce all symptoms, as though by magic, with this, fever and vomiting cease, convalescence is established with increased strength

Vesical distension In this class it is of the greatest importance in young children that we shall closely look to the state of the bladder, which becomes enfeebled early and is liable to overdistension, when greater agony and danger may arise from this than the condition which gave rise to it In fact, it may of itself impart an aspect of forlorn hope to a case of appendicitis, otherwise comparatively harmless An illustrative instance occurred to me some years ago A boy of 9 years, suffering for nine days from appendicitis, was under the care of the most noted pediatrist of New York The case taking on alarming symptoms a noted surgeon was called in consultation It was decided that he had general peritonitis, that the case was not a proper one for laparotomy and that there was but little hope of recovery In the evening of the same day the case came under my charge On inquiring about the urinary evacuation, the nurse said "he was passing urine all the time and was wetting everything" This disarmed my suspicion But the abdomen was enormously distended, besides, it had a peculiar shape and feel, everywhere it was so exquisitely sensitive that anything like proper palpation or percussion was impossible As the boy went under an anesthetic and spasm passed off, the greater volume of the fulness was seen inclined toward the right side, which led me to suspect a vast typhlitic abscess

In opening through the abdomen care was taken to divide and isolate all the layers separately This step, it was soon learned, saved us a serious accident When the peritoneum was exposed it bulged freely into the incision This was very carefully divided, when another smooth glistening body closely followed This at first puzzled me I passed an index finger into the peritoneal cavity and followed this tumor down into the pelvis, where its relation convinced me that it was an overdistended bladder With the abdomen yet open a catheter was pased and 51 ounces of urine withdrawn The appendix, highly inflamed and thickened, was easily found and removed All the pericecal tissues were highly inflamed The boy rapidly recovered, but he would have equally as well and more rapidly had catheterization alone been performed

Another somewhat similar case came under my care two years ago, in Mamaroneck, N Y Dr A H Hoerr sent for me in the evening to come up and operate on a severe case of appendicitis in a girl of 12 years When I reached there, in the afternoon, although there had been a great change for the better, full preparations were made for the operation

On a thorough examination of the case there was no evidence of a single bad sign nor symptom The mother informed me that for five days her daughter had suffered the greatest agony, the pain beginning in the right groin and spreading over the abdomen which had become distended, hard, and sensitive everywhere Thirst and vomiting persisted, and rest or sleep was impossible without large doses of morphin But at midnight she made a desperate effort to urinate and passed nearly a quart vessel full An hour later she rose again and passed fully a half-gallon more Then she went to sleep and did not awaken till nine the next morning, when she had another large evacuation of urine, this time with a copious alvine discharge from the bowels

All the symptoms had vanished and now she only craved something to eat. I saw nothing to warrant an operation at this juncture, very much to the gratification of the poor child and her anxious parent Dr Hoerr informs me that she was out in a week and that there has been no evidence of recurrence

Septic symptoms sometimes accompany those cases of what I would designate "congestive appendicitis"

The modern word "sepsis," which may mean anything or nothing next to malaria, has been made the scapegoat of diagnosis in nearly every conceivable malady In appendicitis it calls up in the imagination pools of pus, a decomposed, rotten appendix, while we remain quite unmindful that there is often at the bottom of this sepsis an overdistended paralyzed colon, filled with a germ-laden, foul mass of impacted feces Let us not be deceived into overlooking the state of coprostasis because there is some looseness, as in some of the worst cases of impaction, it is the most marked These cases all call for a digital examination of the rectum Mr Thornley Stoker of Dublin has called attention to the importance of a critical examination of the colon and rectum in all these cases

2 *Appendicitis with gangrenous, ulcerative perforation and suppurative typhlitis* is a lesion consecutive to the congestive form and is manifested by essentially the same symptoms, only that they are more intensified and the constitution is more seriously compromised In this type, true septic processes are in operation in varying degrees of intensity The appendix is the seat of vascular asphyxia gangrene and perforation It early forms very firm adhesions, most frequently with the cecum, and lights up an inflammation which spreads widely through the pericecal tissues When the cecum itself is the seat of gangrenous perforation, a similar pathologic process is in operation and similar symptoms attend Naturally enough, we look for an acute peritoneal reaction with grave disturbances of the system when mortification has seized on an intestinal structure of the abdominal cavity

A lesion attended with suppurative changes, necrosis or rupture of a tubular structure one would presume would stir up and call forth a series of alarming symptoms, both constitutional and local But, strange to say, in some cases of this class there are but very slight if any marked, systemic disturbances It has been said that perforative appendicitis is of a more insidious character in children, and that the disease possesses a more acute course with them, and hence the importance of early and definite diagnosis here In tubercular cases, it is true, the onset may be quite insensible, but the same obtains in the adults, hence it may be said that as a rule, suppurative or gangrenous appendicitis of various types presents no definite symptoms whatever, until the peritoneal investment is involved and perforation has begun We know no pathognomonic symptoms in the early stage of these conditions, nor at any time during their course in a large number Even if we did, it is doubtful whether it would avail anything for the reason that there can be no doubt, but in the great majority of suppurative or perforative cases, well localized and encysted, the peritoneum, the cellular tissues and the lymphatics are capable of rendering the effete elements of pyogenic and disintegrating changes so innocuous that their residuum may be completely resorbed and assimilated with impunity Appendicitis of this type seldom presents urgent symptoms, except when there is fecal extravasation when pus is formed in great quantities and burrows into the retroperitoneal tissues, or there is impending danger of the pyogenic membrane bursting and provoking a general peritonitis In aggravated cases of this type there is nausea, vomiting and thirst, with persistent constipation from paresis of the intestine Peristaltic tugging of the small intestine on the inflamed, imprisoned cecum produces periodical pain of the most agonizing type This is augmented by coughing, vomiting, or any sudden straining of the diaphragm The pain is felt with the greatest intensity in the epigastrium, although the site of the greatest tenderness is over the intestines, the cecum and neoplastic mass In the adult this is the most constant at McBurney's point, where the cecum is most commonly lodged, but in the infant and growing child the cecum has a longer and looser mesentery which permits of a considerable degree of movement toward the median line, moreover, it has not yet fully descended, and hence McBurney's point in early life is too low down and external to fall over the underlying cecum When the appendix is lodged under the cecum, and is practically extraperitoneal, the suppuration following perforation may penetrate deeply behind the pelvic fascia, there is an absence of a defined tumor, purulent absorption gives rise to symptoms of septicemia, to a low grade of fever with diarrhea, exhaustive sweats and emaciation These are the cases which may be confused with or mistaken for typhoid fever Invariably the system is in a state of toxemia (septic), so that even though a laparotomy be performed and the decomposed purulent material evacuated, septic symptoms yet linger and the patient may sink If recovery follows it is tedious In fact, some of these grave cases are so profoundly septic and the degree of cardiac exhaustion is so great that late operation brings no relief

The constitutional condition is generally the main guide to rely on in the average case of encysted typhlitis or appendicitis The presence of a small iliac tumor gives one little apprehension, if severe pain is absent, there is no vomiting nor thirst, and marked muscular rigidity is absent Resolution in many of these cases is as rapid as the onset The first, most salutary symptoms of this are loss of thirst, the cessation of pain a large free action of the bowels and return of natural sleep and relish for food

3 *Perforation of the appendix directly into the peritoneal cavity* is accompanied with redoubtable symptoms They may set in suddenly or gradually, and are dependent on a general peritoneal infection of all the serous structures in the abdomen It early spreads outward through all the tissues in the abdominal walls The entire intestines and the bladder are paralyzed The abdomen is flat, hard, and everywhere highly sensitive The pain is most agonizing The patient vomits great quantities of bile and suffers from an insatiable thirst The pulse points to a flagging heart and the cadaverous, shrunken features of the patient often portend mortal changes near at hand This is the final close of grave appendiceal cases, said by Dieulafoy and some other authors to be most frequent in children This, if borne out by ample support, should suggest the great importance of a correct interpretation of the symptoms at the very earliest stage of the malady that prompt surgery may cut it short, while yet an operation may be safely supported Could we by any symptoms determine with any degree of certainty when a gangrenous appendix opens into the general cavity of the peritoneum, probably every life might be spared It does not appear clear whether in all these cases they were first of the encysted variety just considered, the pyogenic wall giving way around them, or whether the gangrenous appendix at the very outset opens directly into the peritoneal cavity Some authors claim that on the appendix opening into the peritoneal cavity there is marked shock and great prostration, but this has not been my experience With the escape and diffusion of fecal fluids and gases there can be no doubt that the general

spread of infection extends over wide areas and is attended with an intensity in the symptoms proportional to the extent of pathologic changes But, except in rare cases of the fulminant type, it is probable that after a small perforation the leakage is gradual and we have no sharp peritoneal reaction or grave symptoms until infection is generalized The most constant and harrowing symptom of acute general peritonitis is pain, and no description of pain so quickly crushes the spirit of the stoutest and paralyzes the heart as that suffered in this disease This must be relieved at all hazards, or all is lost The temperature and the pulse fairly presage the progress and the termination of the malady With the subsidence of the pain and a fair share of sleep or tranquility thermal and vascular symptoms show signs of abatement

Extreme restlessness great thirst and a flitting feeble pulse point to a state *in extremis*, when the case has passed beyond all human aid and the end is near

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IS IT POSSIBLE BY PROPER DIETETICS AND HYGIENE TO EXTERMINATE TUBERCULOSIS?*

J E KINNEY M D
DENVER, COLO

I am aware that the literature on prophylaxis of tuberculosis is already very complete and contains more suggestions than we are willing at all times to take the trouble to thoroughly carry out, but the paramount importance of the subject, as shown by the terrible inroads being made upon the people of all lands, is my plea for bringing these considerations before the members of this Section with whom rests most of the responsibility of educating the people to rid themselves of the ravages of the disease

It is now nearly twenty years since the discovery of the bacillus of tuberculosis by Koch During this time many of the world's greatest scientists have labored incessantly to conquer this microscopic enemy of mankind, and destroy its effects The history-making in all departments pertaining to tuberculosis has been rapid, and the data collected are of the greatest value The causes have been surely demonstrated, the prevention is fast becoming an exact science, and the treatment is every year being improved, though yet far from what we could desire At one time it was thought that a specific had been found The press of the whole world was filled with praises for the discoverer, and it seemed fitting that to him should come this great honor He had shown the existence of the germ, why should he not find the power to destroy Soon it was learned that too much had been expected, more, indeed, than the investigator had claimed, for the new germicide proved to be impotent Since then we have perhaps grown wiser and very few are now looking for a specific cure

In spite of our better knowledge and treatment the disease has, in the meantime, at least been holding its own or perhaps gaining ground So great has the peril become that we can no longer consider simply the individual case our attention being more and more directed to the saving of the people This was shown when the invitation was extended to attend the International Congress in Berlin last year The wording showed the issue—*Kongress zur Bekaempfung der Tuberculose als Volkskrankheit*

The chief conclusions in this Congress, and also in articles in the symposium on tuberculosis, at the fiftieth meeting of the AMERICAN MEDICAL ASSOCIATION, were that the disease is not hereditary but acquired (Virchow[1] says "I now positively dispute this heredity"), that to cure a large percentage of cases, the diagnosis must be made before destruction of the lung tissue has begun, and that by far the surest, and consequently the most important consideration is the prophylaxis through public and personal hygiene and the maintaining a high degree of general healthful conditions in the individual

Neither in the Congress nor in the AMERICAN MEDICAL ASSOCIATION meeting was any method of treatment given which was expected at all to cope with the disease unless the cases could be seen in the very earliest stages Many are curable if diagnosis is made early enough and proper treatment at once instituted An analysis of several thousand treated in high altitudes shows that the average percentage of cures in the first stage is 65 per cent, and in the second and third combined, only 15 per cent[2]

Granting that eventually our treatment can be improved till all cases can be cured, very few realize at what tremendous cost this cure is accomplished Based on the figures of Knopf, that the cost of a tubercular charity patient in New York is $522, Evans[3] estimates "the cost of tuberculosis in the U S $574,000,000 each year, and that tuberculosis kills 152,000 people in the U S each year In the late war there were killed in all directions and in every way, 6300 people while the war loan for the prosecution of the last war was $150,000,000"

But I wish to call attention to another cost which is much greater for which one of us would not willingly pay any sum which he could command, if he could ease the suffering and restore the health of one dear to him We are all too familiar with this cost of mental and physical suffering, deprivations and exile from home

Granting, then, that a cure is possible in every case, is not the cost and sacrifice too much, is it not better that the emphasis be at once placed where it belongs, and that is on the prophylaxis?

* Read by Title in the Section on Physiology and Dietetics at the Fifty first Annual Meeting of the American Medical Association held at Atlantic City N J June 5 8 1900

I realize that to place great emphasis upon any one point is to apparently minimize other extremely important ones, but now that the subject of general hygiene relating to the care of tubercular subjects, their surroundings, and the imperative disinfections required, is so thoroughly understood by all, at the risk of being thought as taking a too one-sided view of the matter, I will say nothing more of the general hygiene as I wish to present some facts which belong especially before this Section

Careful study of statistics shows that over 12 per cent of all deaths are from pulmonary tuberculosis In an extremely large percentage of individuals dying from other causes, the bacillus tuberculosis has been found In some cases active destruction of tissue had been present and entirely subsided, and in others the bacilli had apparently had no effect on the individual We know that we are all constantly meeting the bacilli and taking them into our systems and some of us are uninjured by their presence There is scarcely any place where the bacteriologist has not demonstrated them in the dust in the streets, in all public and private places, even the air we breathe and the food we eat are laden with the germs Why is it, then, that some individuals go free, while others yield easily and succumb when attacked? For so omnipresent is the bacillus that if it were dependent alone on the germ, tuberculosis would soon claim the whole world as victims Fortunately there is a condition against which this germ is powerless, a condition within ourselves which gives protection and immunity, a condition which the individual can absolutely modify, and almost entirely control

Thomas,[4] in his twelve directions to those who would avoid consumption says "Probably the most important of all is to see that the digestive functions are kept in perfect order Dyspepsia is more often a forerunner of tuberculosis than any other disease The secretions of a healthy stomach will dispose of a large amount of infected material, but when diseased, the stomach is the principal avenue of infection"

In the logical article of Davis,[5] he says "The true field for sanitary work in exterminating the bacillus of tuberculosis is in removing the defects, imperfections and impairments of vital resistance in the living body that make it possible for the microbe to multiply and produce disease either in man or animals Prevent the formation of the necessary soil and you make sure of preventing the crop"

Knopf[6] tells us that he considers "a careful inquiry into the mode of life of the patient, past and present, of great importance The probably unhygienic environments, a dissipated life, a love for strong liquors, irregularity of meals great disappointment in matters of love or business, or other depressing factors, all will often give a clue to the origin of an acquired, or to the awakening of a latent, pulmonary tuberculosis It is well known that many a pulmonary consumption has been preceded by digestive disturbances or typical dyspepsia Bad eaters are nearly all candidates for consumption"

Bouchard[7] writes "Disturbances of nutrition rule, in my opinion, the largest number of chronic diseases, and explain the appearance of many illnesses of an acute character" He also says "We must still remember the fact that dilatation of the stomach renders the economy more vulnerable, and opens the door to diseases of debility Pulmonary phthisis is often induced by dilatation of the stomach, which exists in two-thirds of the tubercular and, if we have sought for it early enough, we can convince ourselves that the physical signs of dilatation have sometimes for long preceded the first symptoms that may be regarded as the premonitions of tuberculosis"

In 632 cases of tuberculosis seen in private practice, with the exception of those which developed after unresolved pneumonia—and even in many of these—over 88 per cent gave a history of either intestinal or gastric disturbance which had existed for a period varying from three months to several years, before the lung became involved

In every instance in the remaining 12 per cent the tubercular condition had existed over three years before the patient consulted me and in each case at this time there was a marked digestive disturbance Though each one was positive that there had been no early trouble of this kind, I felt sure that if an examination could have been made earlier quite a number of these would have been added to the 88 per cent It was manifestly impossible to determine what form of disturbance preceded the tubercular trouble, inasmuch as the patients were not seen by me until long after the disease of the lungs had begun It was even difficult to judge whether the initial digestive trouble was in the stomach or intestine, or both With one exception these histories show a very representative class of citizens, coming from nearly every state in the Union Many came from large eastern cities and not a few from country homes, but only a small number were from the chief center of the disease, the overcrowded tenement districts of the cities This was probably due to poverty and consequent inability to go to a distant climate But this indigence would surely be conducive to the very conditions of inanition which were so frequently found in my cases Undoubtedly those who have worked most in these districts have found that there, pre-eminently, do indigestion and mal-assimilation precede the appearance of the tuberculosis and these disturbances may have as much to do with the frequency of the disease among such persons as the overcrowding and unsanitary conditions

From the conditions present at the time of my first examination, I should estimate that of the 88 per cent who gave a history of indigestion antedating tubercular trouble, 78 per cent were intestinal, 22 per cent were of stomach origin, though at the time of examination over 56 per cent showed trouble with both organs As a long time had elapsed since the beginning of tuberculosis, the initial symptoms had changed greatly, and in most cases had grown worse In many instances the patient would say that his digestion had always been good, and still remained perfect and would sincerely think so An examination would, however, reveal a different condition than he had supposed, microscopic and chemical abnormalities from an empty stomach and after test-meals, great distension over the abdomen, which had continued so long as to make all the abdominal muscles flabby and weak, frequently accompanied by a considerable degree of tenderness over the stomach or intestines, with sometimes tenderness and hypertrophy of the liver, coated tongue, extreme sallowness over the whole body, urine high colored, of high specific gravity and containing indican, bile or the bile pigments in great excess, often a large amount of catarrhal mucus in the stool and microscopic evidences of an excessive amount of undigested food in the feces Yes, he had noticed some of these things for a long time,

but had not known that they meant anything He would simply loosen the clothing over the abdomen after eating and then would be all right

It is my experience that patients are not very observing Unless suffering acute pain they will say that they feel no disturbance In most cases it requires very close questioning to obtain reliable histories but perseverance in asking will frequently reveal what has entirely escaped the patient's attention The history of such disturbance has been established in case after case when the first questioning would fail to elicit the fact of there having been any digestive fault One of the chief reasons for the patient not observing any disturbance is because it comes on so slowly and many times especially in the intestine, is without pain Some have never known what good digestion meant, nor to how much better they were entitled A few years ago I saw a patient in an eye clinic who came to be treated for conjunctivitis The Doctor asked her about the vision and was told it was perfect He then asked her to tell him the time by the clock on a distant tower She replied that he could not fool her there was no clock where he pointed He then adjusted by guess some lenses in a frame and put them before her eyes The look of astonishment was sufficient to show that she now realized that she never before had really seen and yet she thought her eyes were perfect

The history of my cases demonstrates clearly that previous to the tuberculosis manifesting itself there was a period of some months or years during which the individual was in a below-par condition I do not argue that all depleted conditions lead surely to tuberculosis but I do insist that there are very few tuberculous persons who did not by their own habits of living, gradually bring themselves into a condition in which they could contract the disease If this lack of resistance or debilitated condition produces or is the soil which is favorable to the growth and the development of the bacillus, is it not imperative that we should search early for the primary causes and eradicate them at once?

It is almost axiomatic that in all chronic diseases where no organic damage has been done, to remove the causes is to effect a cure, or rather allow Nature to do so I wish to speak particularly of the earliest stages of the digestive trouble, especially to draw attention to the original causes which produced the faults rather than the effects on the digestive organs We need then to go back a step and look at other factors, concerning the habits of the individual, which are of vital importance, inasmuch as they have caused disturbances with the nutrition

Based on standard diet-tables compiled by prominent authorities, of the whole number who had had digestive trouble nearly 76 per cent gave a history of having eaten an excessive proportion of carbohydrates 65 per cent having indulged largely in sweets and desserts, many times having made entire meals from these confections, over 68 per cent had for some protracted period overeaten, 20 per cent had lived on a general mixed diet—about standard, 45 per cent had taken no regular out-of-door exercise, 34 per cent had been excessively working from fourteen to eighteen hours daily—and in many of these there had been an element of worry and anxiety—had eaten very hastily, and had taken little or no rest during the day and not sufficient sleep at night, too little water drinking between meals, too much at meals School children had not infrequently broken down from being overtaxed and improperly fed The usual annex to our public schools is the penny candy shop across the street, always well patronized In one of the Denver public schools, whose pupils are from homes in which we would expect the greatest intelligence in the care of children, a teacher whose pupils averaged 13 years of age, found that out of 45 children, 36 received from 50 cents to $2 00 a month in spending money The remaining 9 received either more or less Without exception, every child patronized the "penny candy shop,' and not one was restricted as to the amount he should buy or eat Inquiry shows that this applies to other places throughout the country

Let me very briefly refer to three of the greatest essentials to a perfect digestion 1, a proper anatomical and physiological condition of the digestive organs, 2, proper foods—including kind variety quantity, proper cooking, etc , 3, applied nerve force to run the digestive apparatus

Any habitual departure from these essentials will cause trouble, but the list of departures in civilized countries is almost legion, and hence in some particular case may be very obscure, but must be sought till found Over-eating is one of the greatest of our faults Abernethy has told us that "one third of what we eat keeps us, the other two-thirds we keep at the peril of our lives" The human machine is the most economical engine constructed Nearly all of the force and heat generated can be applied without waste, and generally speaking, if we supply the proper materials with which it is to work, we need not concern ourselves, but may be sure the work will be well done and proper nutrition supplied

When the beginning of digestive disturbance has been found, let me insist that it is not sufficient to say to the patient "Eat what agrees' Almost before anything else this must be borne in mind Bruce[8] has well said "First, food is not a mere matter of feeding or giving nourishment Food is to be employed as a means of treatment at once powerful and delicate, calculated not only to nourish the tissues but to produce immediate, specific and remote effects of a perfectly definite and natural character on the different organs of the body just like the different medicines Second if the practitioner do not order the diet, some one else will—his patients or their friends When he permits them to do so, that is to take an important part of the treatment out of his hands, he usually finds that patients yield to tastes and habits that may be morbid, or to advice which is well meant but probably unwise, and that patients' friends are moved by one thought only—to 'support the strength,' whatever else may be the result, ignorant or unmindful as they are of the other actions of food Therefore the practitioner must never lose control of the diet It is not enough that he should permit certain foods, he must employ them definitely as carefully-ordered means of treatment He should always think of food before he thinks of medicine, and give it a corresponding position of importance in his directions to the nurse or patient"

I will not stop long enough to discuss here what constitutes a proper diet for a healthy person I believe that we have a right to judge from the construction and physiology of the digestive tube, that a mixed diet is the normal diet also the quantity of each class, varying with the latitude in which the individual lives his environment, whether of sedentary habits, or living an out-of-door life, and whether he is a worker or a drone

It must be carefully borne in mind that proportions

of food given in standard diet-lists are for persons with unimpaired digestion When either the stomach or the intestine or perhaps both organs show faults in doing their work, no matter whether the causes directly or indirectly have to do with the digestive organs, then perhaps an entirely different proportion of foods must be advised, the proportion depending on which of the digestive organs is most at fault, sometimes cutting off, more or less temporarily a part or even all of one of the broad classes of foods, that is, the proteins or fats, or carbohydrates, or some particular variety of one of these classes As more frequent cases of intestinal disturbance occur, we shall more often be obliged to limit the starches and sweets Not all of these varieties are digested with the same ease, so it is self-evident that that food which is most easily digested and has the highest nutritive value is best for the patient

It must not be forgotten that there are two ways of judging the values of food, chemically and physiologically, chemically, in having the constituents which are necessary to the organism, but which perhaps can not be appropriated For example baked beans are nutritious and very rich in nitrogen, but physiologically they may be easily digested and assimilated by one person, while with another produce only excessive fermentation with its attendant mischief

In an article by Professor Atwater,[9] some of his conclusions are as follows "Our diet is apt to be one-sided It often does not contain the different nutritive ingredients in the proper proportions We consume relatively too much of the fuel ingredients of food—those which are burned in the body and yield heat and muscular power Such are the fats of meat and butter, the starch which makes up the larger part of the nutritive material of flour, potatoes, and sugar, of which such enormous quantities are used in the U S Conversely we have relatively too little of the protein or flesh-forming substances, like the lean meat and fish and the gluten of wheat, which make muscle and sinew, and which are the basis of blood, bone and brain We use excessive quantities of food Probably the worst sufferers from this evil are the well-to-do people of sedentary occupations—brain workers as distinguished from hand workers Not everybody eats too much, indeed there are some who do not eat enough for their healthful nourishment But there are those and their name is legion, with whom the eating habit is as vicious in its effects on health as the drinking habit, which is universally deplored"

In connection with Professor Atwater's deductions as to the value of a relatively larger proportion of albuminous foods in maintaining a higher degree of health and strength, it is not out of place to say here that nearly all of the authorities now agree that in the treatment of tuberculosis the nitrogenous foods are very essential Indeed, the recent experiments of Richet[10] speak very emphatically as to their worth "In a large number of dogs inoculated with human tuberculosis, under the same conditions, all died except those which had been fed exclusively on meat, 50 per cent of these survived Richet is inclined to explain this salutary action of meat diet on the same principles as the metaphoric method of therapeutics which he recently announced in the enhanced effect of sodium bromid when salt is almost entirely omitted from the food The impregnation of living cells by this or that alimentary substance renders them less apt to feel the influence of this or that medicinal or toxic substance By changing the nourishment of the cells they may be rendered more or less liable to the action of other substances In feeding dogs with meat exclusively, the cells possibly become impregnated with the extractives of the meat and do not take up the toxins of tuberculosis"

Apropos is the edict from Rome The *Medical Age* for June 25, 1899, says "It is publicly stated that there has been an important secession from the ranks of vegetarianism, the entire Dominican order in England having received permission from Rome to eat flesh four days a week instead of perpetually abstaining therefrom as heretofore In cases of ill health or especially hard work, meat is to be allowed six days a week This decision has been arrived at after the closest medical and official investigation of the effects of perpetual abstinence from meat in a variable climate like that of England, the result being that vegetarianism has been declared incompatible with physical strength and hard work"

Also, Sir Wm Roberts[11] says "The effects of a vegetarian diet would only be gradually developed, and would probably not be fully impressed on the bodily and mental qualities of the race until after such habits had been continued through two or three successive generations" And then adds, "I have encountered in Salford, where some years ago there existed a flourishing colony of vegetarians, a tradition that though vegetarianism might suit the parents it was bad for the children And I have seen some striking examples in that borough which appeared to indicate that this tradition was well founded"

In my experience, the greatest harm which has come to any class from taking too exclusive a diet of starches and sweets has come to those of sedentary habits In so far as one requires a greater quantity of the vegetable foods, he needs much more active exercise and out-of-door life Frequently one who can not eat a normal proportion of the vegetable foods when confined to his office or desk, can take a large increase with impunity when spending his time away from the depressing environment

As Wendling has aptly said "No animal except man can be tempted to do himself harm against his intelligence" Yet, men go on cultivating all sorts of pernicious habits, eating rapidly and improperly, over eating, and eating irregularly, eating foods chemically antagonistic, taking too much fluid with meals, habitually drinking ice water, living and sleeping in over crowded rooms which can not have sufficient supply of fresh air, cultivating worries and anxieties to the highest degree, and being fatigued mentally and physically when ready to eat I want to lay particular stress on this last-mentioned habit Whenever there is either mental or physical fatigue too much emphasis can not be placed upon resting from twenty to thirty minutes before putting food into the stomach, and by resting I mean to make it absolute, by lying down and thoroughly relaxing physically and mentally, no reading talking or planning Then if after a half hour of such rest or sleep, one is still fatigued, it may be better to omit the meal entirely, rather than to subject the digestive organs to work which they would not do well The ability to get perfect rest and relaxation is not easily acquired, but if persistently practiced day after day can be so perfectly attained that one will feel entirely renewed after a rest of ten or fifteen minutes

These facts which I have reviewed can be readily

proved by all If they stand uncontroverted, then it is the duty of every member of our profession to take immediate action To do this successfully three things are necessary

1 We must constantly revise and improve our methods of diagnosis so that we shall recognize the earliest tendencies toward unhealthy conditions We need not wait until there is a fully developed digestive disturbance before we decide where the trouble is, for then the patient is able to recognize it for himself To illustrate the advance made in recent years in making early diagnoses let me cite Bouchard,[12] in his discussion of the great prevalence of dilatation of the stomach He says "I still admit, through courtesy, that it is necessary to perceive the splashing below the middle of a line drawn from the umbilicus to the point nearest to the border of the left costal arch But, in reality, this line is of little importance Every stomach which is not retracted when it is empty is a dilated stomach Dilatation is not distension A dilated stomach is a stretched stomach, the cavity of which is apparent only when it is empty, because, though its walls then touch each other, it is no longer capable of diminishing its size by retraction ' This is but one of many instances in which we now make earlier and better diagnoses than formerly

2 The study of dietetics must be more carefully pursued After quoting Donders, "whoever works at the development of our knowledge on food substances is working on a broad basis for the development of mankind"—Hemmeter[13] says "Fortunately for us, many bright intellects have already applied themselves to this work, and our knowledge has been enriched by treasures of valuable information But the well-advised special student can not fail to recognize that we have only entered a vast territory, and that the greater part of it remains to be explored Even the small portion which by hard toiling is clearly our own is, we regret to say, far from being the common property of the profession—at least it does not seem to be taken advantage of the profession at large failing to realize that a logical and individualizing diet is a more potent therapeutic factor than medicine"

If, on account of the many demands on his time, the general practitioner has neglected the study of that greatest branch of therapeutics, the study and application of diet and hygiene in the cure of disease, let me urge that no other subject to which he can give his attention will so surely and easily enable him to cope with so many diseased conditions as such a study Proper nutrition is the very corner-stone to the health building

3 There is necessity for a long siege of educational work with our patients and the general public, but especially with the younger portion of the community, either directly or through the parents And this is the most difficult part of the problem They must be taught that good health ought to be the rule and not the exception, that habits of wrong living are the causes for the great majority of ill health, that each person is mainly responsible for his own illnesses and that if he will he can prevent them Especially must this be insisted on in families where tuberculosis has existed

In every community the hygienic conditions are being improved, so that the dangers from the source of improper sanitation and lack of disinfection are being steadily lessened This is due to the work being so well organized and prosecuted by our medical societies and boards of health

Now, the task of showing that persons in a depleted condition are practically the only ones who are in danger of becoming tubercular is imperative with us We must teach the public that there is immunity, and that it comes in the bodily conditions which exist in that general state which we call good health For obvious reasons the work must be largely carried on by the family physician and the parents

In conclusion as Dettweiler[14] affirms that "The raising of the standard of food, betterment of its quality and quantity, are the unqualified requisites of every success, they are to-day the foundation and corner-stone of therapeutics of consumption," so I emphasize their place in prophylaxis

EXTERMINATION OF TUBERCULOSIS

Is it possible by proper dietetics and hygiene to exterminate tuberculosis? I believe it can be gradually accomplished, though there are two obstacles which are almost insurmountable, the first being the fact that as a rule people are not ready, while having a fair degree of health to make effort to preserve it Those who have not suffered are not willing to be taught, and so will not readily co-operate in regulating the conditions which have to do with their own health, or the health of their children until they become ill Then the poverty of many in small communities and of the masses in the large cities, does not permit such foods and shelter, air and exercise as are required to produce healthful physical conditions But each one must answer the question for himself, and as he thinks so will he work, and as he works so will the cause be hastened or retarded, for according to our present knowledge it depends not on any climate and its influence, nor on any community and its sanitation, nor on any one person and his work, but on the united efforts of all in every community

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VARIOLA AND VARICELLA *

M A AUSTIN, M D
ANDERSON, IND

From a point of pertinent interest I deem it somewhat less than an impertinence to consider this subject, which within the last fourteen months has served to create disturbances of varied degree over different sections of Indiana

The fact of some chicken-pox cases being present in this city, the mildness of some cases not requiring a physician until several members of a family were attacked, snap diagnosis from incomplete observation, and last but not least the ignorance and criminal negligence of some of the physicians in denying the existence of the disease as smallpox, has, with the refusal of the authorities to build a pest-house, notwithstanding the

* Read before and published by request of the Harvey Medical Society Anderson Ind

demands of the secretary of the Board of Health, W T Fairfield, served to keep up a desultory outcropping of cases in different parts of the city, until up to April 15 there had been reported and discovered 149 cases since the beginning of the epidemic

We have positive evidences of the disease having been acquired from not only prolonged and continuous exposure, as in the same family, but also occurring after transient and slight exposure, from infected articles taken from one house to another, and one instance in which the only traceable exposure was from an open door through which were being carried articles to be destroyed

One death has occurred, the patient being a baby 1 month old, who died during the second febrile or pustular stage

The life history of this epidemic is identical with that of the more fatal forms—an incubation of twelve to fourteen days, a period of febrile invasion lasting four days, the fever-curve showing from 101 to 105 degrees, during which time there is experienced those never-to-be-forgotten pains in the limbs and occipito-lumbar regions Nausea and vomiting as a rule accompany the period of invasion and a chill generally serves to usher in the attack About the fourth day the temperature drops to normal and the typical eruption begins to appear

The initial rashes, as described by Osler, are of about the same frequence as in the more severe forms, occurring as a scarlet-red rash on the inner side of the thighs or on the sides of the chest, appearing on the second or third day and disappearing on the breaking out of the true eruption This eruption in the discrete form appears first on the inner surface of the wrists and forearm, and along the forehead as small red spots From here it spreads rapidly to other parts of the body, so that at the end of the first twenty-four hours from the fall of temperature, the distribution of the eruption can be definitely ascertained Forty-eight hours later the eruption has passed through the papular stage, in which the characteristic shot-like feel might serve alone to anticipate a diagnosis The sixth day finds opalescent papulo-vesicles, light yellow at the top from a collection of serum, and these rapidly become purulent, with the change there is a settling down, flattening process in each and an umbilication of the center This umbilication can be seen most plainly from the sixth to the eighth day, after which the pustule assumes a form rounded and globular from distension, and the easily ruptured roof gives escape to a varying quantity of a greyish-yellow pus

On the occurrence of pus the temperature again rises and remains from twenty-four to forty-eight hours, unless means are taken to abort the absorption of the pus products by allowing their escape

The eruption as to site is a universal one, including the palms of the hands and the soles of the feet, showing first on the forehead and inner surfaces of the wrist and forearm, and diffused most thickly over the head and face The eruption is a symmetrical one unaccompanied by moisture at any stage, while the lesions are progressive, appearing first as discrete red spots which rapidly become elevated from the surrounding skin, forming papules of a beefy red color, varying with the complexion of the different patients The apex of these papules is rounded, the base not infiltrated and they are of so firm consistence that they feel like shot beneath the skin

The progress from the papular stage is with so great uniformity that forty-eight hours shows those papules to be transformed into vesicles with clear summits, and their roofs gradually flatten out and the flaccid walls allow a cupping of the center of each vesicle Around the base there appears a trifle of induration, and a slight areola of a purple reddish color, extending scarcely more than a millimeter from the base The change from a vesicle to a pustule gives to it a greyish-white color the walls lose their flaccidity and the roof its umbilication, producing a lesion that is larger than the original papule, finally becoming a typical pustule, thin walled and easily ruptured

The order of maturation corresponds to the positions of precedence face and forehead, wrists and arms, body and limbs, then last the palmar and plantar surfaces Should the roof of these pustules be destroyed and the pus removed, we find a depression corresponding to the base of the pustule in size and shape, shallow, with a slight induration at the base, and an uneven granular, easily bleeding floor with sloping edges

This small granulating surface, when left exposed, becomes a hemorrhagic color and the depression is filled with a serosanguinous crust, easily disturbed and leaving a bleeding floor When not disturbed the pustule, during the secondary fever, begins to dry up and a greyish-brown crust is formed, which in four or five days can be completely removed Pitting depends on the severity of the disease

Where the pustules are ruptured during the ripening stage and the pus expressed, a more or less granulating surface is allowed to heal and with proper precautions a transient stain will be the only remains These stains or post-eruptive lesions, independent of pitting, remain a variable time up to three months On the disappearance of the crusts the stains are of a salmon-pink color getting darker after a few days very noticeable on exposure to cold, showing then as a bluish-black through a thin and slightly corded area corresponding to the base and areola of each separate eruption

Our smallpox diagnosis has been questioned in regard to chicken-pox, impetigo and the pustular eruption of syphilis Not having had the marvelous cosmopolitan experience of some of our local physicians, I am unable to verify their telescopic conclusions in regard to the eruption being "Cuban itch," "Manila scratches," "Philippine impetigo," or "Arkansaw jiggers" Neither has it been my lot to have such close communion with some of the lower animals as to be able to make a snap diagnosis of "hog measles" or "dog itch"

Chicken-pox is an eruptive disease that may be only easy to differentiate from smallpox if one takes into conclusion the whole subject, yet one is hardly excusable in making a mistake if he takes into consideration the points of history, invasion and eruption

Age of the patient can not be taken as a too weighty factor in the differentiation of one from the other One of the most typical cases of chicken-pox I have seen occurred in an adult 38 years old, and during this epidemic A case of chicken-pox in which the individual few pits are deeper than those which occur from mild smallpox is not uncommon

The incubation period of varicella is generally shorter, averaging about ten days, while the smallpox cases have almost invariably shown the first symptoms on the fourteenth day

The constitutional symptoms in some cases of the smallpox were so slight that they were no greater than

would be expected in varicella, but there was no immediate appearance of an eruption as in chicken-pox

The diffusion and locality of primal appearance are similar in both diseases—the face and neck arms and exposed surface—but in no instance do we see an adult with chicken-pox have an eruption on his palmar and plantar surfaces In some of the cases of chicken-pox in children, where those surfaces offer little if any more resistance to the occurrence of a local infective process we see the papules and vesicles occur Neither have we had the croppy character in this epidemic as we do in varicella, the eruption appears, the lesions progress through their characteristic papular vesicular and pustular stages then desquamate if the pustules are unopened The chicken-pox cases show papules, vesicles and pustules at the same time over the same area, and the eruption shows a deeper infiltration at the base, a wider areola and in general a smaller sized papule than that of smallpox In smallpox the invasion and severe constitutional symptoms last four days In varicella twenty-four hours are sufficient to bring forth the eruption, and with the eruption there is an exacerbation of the febrile and systemic symptoms something that is not found in smallpox The papule of varicella is generally smaller does not possess that shotty feel and the progressive changes are more rapid

There is an umbilication in both eruptions, but the time of appearance of each and their characteristics are hardly to be confounded In variola there is an umbilication during the vesicular stage, which is not a permanent depression disappearing on the occasion of the pustular change In varicella the dipping down occurs during the close of the pustular stage and marks the point of beginning of the drying-up process which leads to crust formation and desquamation

Very frequently in varicella the eruption is vesicular in its entire nature, and Holt speaks of it as being the rule instead of the lesions being progressive

In contrast to the greater frequency of the eruptions on the face in smallpox, we have the greater number scattered over the back in varicella, they occur in the mouth and pharynx in both diseases, but differ in their characteristics here the same as on the outer surface

Following desquamation in smallpox we generally have left a tubercle varying in size according to the depth and extent of the inflammation, this being a hyperplastic condition In the severest cases, the inflammation is destructive instead of regenerative, and with the destructive process involving the papillæ, we get a pit or scar In chicken-pox we have the site of the inflammation on the same level as the surrounding skin

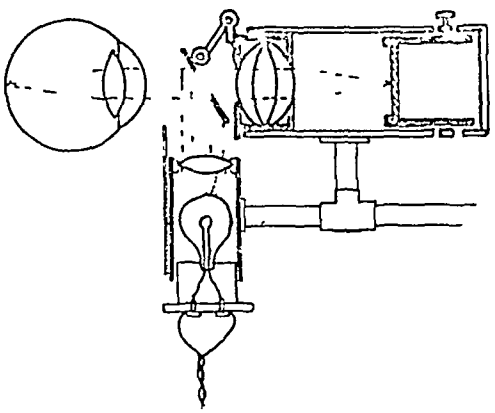
To attempt to differentiate the two diseases from the post-eruptive lesions alone, at a time greater than two weeks after desquamation, is something that without considering the entire case history might be rather difficult, were the two conditions to be of similar severity we have noticed, though, that following the scaling of chicken-pox we invariably have a bright red spot left, while in smallpox, where the eruptions have been allowed to follow the entire course undisturbed, a similar discoloration is present, but in those cases where the vesicles are ruptured the resulting stain is of a bluish-black color

In conclusion, a good rule to follow is the one that reminds you that typical cases occur rarely outside of books when you are seeking them The present epidemic is one which, either from a diminished susceptibility a greater acquired or natural immunity, or a diminished virulence of the infection which has produced this spread of smallpox, discrete in form, modified in its systemic reaction and mild to a degree, unless after complications of which we have no knowledge now, only speaks volumes for vaccination and its results Finally, there is no single pathognomonic symptom to either disease that can not be simulated, one in the other, yet in no case have I seen this similarity carried to an extent sufficient to make the differentiation indeterminable at some stage of the eruption

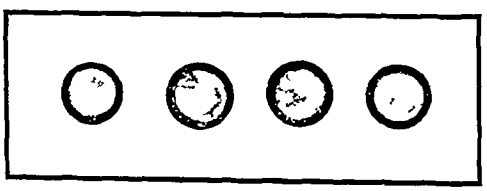
PHOTOGRAPHING THE EYE-GROUND

SHIRLS JACKSON, M D
PITTSBURG PA

The illustration shows a photograph of the eye-ground and the instrument with which it was taken As the drawing indicates the instrument is essentially a self-illuminating ophthalmoscope, where a little camera—practically an artificial eye—is substituted for the observer's eye The patient's head is fixed immovably in the operating-chair, to which the movable arm of the camera is attached The camera is swung in front of the patient's eye, and is rested firmly upon the cheek



with an intervening pad for thermal insulation The cap at the back of the plate-holder is removed, and with the pupil dilated and the unobstructed eye fixed upon a remote object, a faint inverted image of the fundus may be focused upon the ground glass The movable collar is fixed by the screw to mark this point upon the scale of diopters from which a rough estimate of the refraction may be had—a rough optometer that might be improved As the collar insures a return of the plate-holder to the focal point, the holder is removed, and with all lights extinguished excepting a



ruby lamp, a photographic dry plate is inserted in place of the ground glass, the holder covered with the cap is replaced, and the camera-light turned on (Fourteen to twenty-eight seconds with blonds Only the disc appeared in brunettes The actinic value of the color of the eye-ground governs the exposure) The negative is stored in a light-tight box, or developed at once

I regret to say that the failures are both numerous and vexatious, and that the eye easiest to photograph is one with the light perception greatly diminished or entirely lost The picture shown in the illustration was of such an eye

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STAPHYLOTOXINS

The poisons of the staphylococci have received but little notice When one considers the great variability of the virulence of different races of staphylococci, occurring as they do now as harmless saprophytes, again as pathogenic agents of a great power it certainly is remarkable that so little attention has been paid to the production of toxins by these organisms under different circumstances Neisser and Wechsberg[1] have in a measure met this want by an exhaustive study of the staphylotoxins As pointed out by Krauss[2] staphylococcus aureus produces a substance which dissolves red blood-corpuscles, i e, acts as a hemolysin Neisser and Wechsberg studied the action of this hemolysin on the blood-cells of the rabbit Its production appears to be quite independent of degree of virulence, and it is destroyed by heating to 56 C for twenty minutes It was found that typical staphylococcus aureus and albus produce the same hemolysin, further that there are staphylococci which do not produce any hemolysin and which probably constitute a distinct group without any pathologic significance

Many blood cells are not dissolved while bathed in serum It was found that serum protects other corpuscles as well as its own from the action of staphylolysin, i e, it normally contains an antistaphylolysin Normal human serum contains antistaphylolysin, although in varying degrees of activity Whether this substance is present as the result of staphylococcus infections or otherwise has not been determined definitely Antistaphylolysin is also obtainable by immunization, as two or three subcutaneous injections of an active toxin produce an efficient antitoxin By suitable experiments the authors determined that staphylolysin like diphtheria toxin and tetanolysin consists of a mixture of toxins of varying avidity

Van de Velde[3] demonstrated that staphylococcus pyogenes contains or produces a substance which destroys leucocidin This observation has received confirmation from various sources, and Neisser and Wechsberg demonstrated again the presence of leukocidin in filtrates of staphylococcus cultures by means of an interesting and ingenious method, the principle of which is the following normally leukocytes take a certain amount of oxygen from the surrounding medium and this in sufficient quantity to reduce and render colorless substances like methylene blue, when the leukocytes in a fluid are killed reduction of the methylene blue does not take place if the fluid has been kept sterile In this manner they measured accurately the leukocidal action of leukocidin This substance is also destroyed by heating at 56 C for some minutes, and experiments with antileukocidin and leukocidins obtained from various races of cocci led to the conclusion that the leukocidins are identical Normal serum of horse and of man contains antileukocidin, which may be produced also by immunization During immunization infarcts appeared in the kidneys, marked by great accumulation in the vessels of dead and disintegrating leukocytes, the result of the action of the leukocidin

It has thus been conclusively shown that staphylococci produce at least two distinct toxins namely staphylolysin and leukocidin Hence these microbes belong in the group which produces soluble poisons, and this fact must be borne in mind in the consideration of the pathology of staphylococcus infections

1 Zeitschr f Hyg u Infektionskr, 1901, xxxvi, 299 349
2 Wiener klin Woch, 1900, 3
3 La Cellule, x, quoted by Neisser and Wechsberg

HEATED SERUM TO PREVENT INFECTION

The serum of the normal blood has been found to contain a remarkable ferment, or group of ferments, which when fixed by certain specific substances to bacteria and to cells of various kinds, may cause their destruction and solution This substance or group of substances was called alexin by Buchner, it is destroyed by heat for some minutes at 55 C Bacteriolysis, hemolysis, and cytolysis in general have been made the subject of many exceedingly interesting investigations during the past three or four years, and certain general principles have been established in regard to the actions of serums of various kinds Thus it has been found that a large number of antiserums may be produced by first injecting animals with the special cells or bacteria or other substances upon which it is desired that the antiserum should act The reactions that occur in experiments of this kind are exceedingly complex, and the resulting phenomena correspondingly difficult to explain Some time ago Wassermann advanced the claim that the principal reason for the little success obtained by the use of bactericidal typhoid serum depended on the circumstance that the serum did not contain enough alexin During bactericidal activity alexin is actually consumed, so that while an animal may be protected against a certain quantity of typhoid bacilli, it is killed when an excess of this quantity is introduced In order to meet this emergency Wassermann concluded that more alexin should be added to the immune serum, and he found that by adding normal ox serum he could protect guinea-pigs against an otherwise fatal dose of typhoid bacilli But it is not so certain that this effect is due to the alexin normally present in ox serum

Besredka[1] suggests that it may be due to the agglutinating effect of the ox serum upon typhoid bacilli, which are then more easily destroyed In order to demonstrate whether the alexin in the ox serum actually increases the efficiency of antityphoid serum the experiments should be repeated after having heated the ox serum Metchnikoff and his pupils have found that heated normal serums, in which the alexin has been destroyed do not thereby lose all their power Heated serum injected into the peritoneal cavity twenty-four hours before the bacteria may save guinea-pigs from twice the fatal dose of cholera germs or typhoid bacilli Still holding to the phagocytic theory they explain this result as due to the stimulating action which they have observed heated serum has upon the cells that act as phagocytes and also as due to the agglutination of the bacteria by the heated serum For these reasons Metchnikoff and Besredka suggest that heated ox serum might be used with advantage in operations on the peritoneal cavity The peritoneum might be bathed in a quantity of serum and after the operation a certain amount could be left in the cavity in order to agglutinate any microbes which might have been introduced and to stimulate the phagocytes Further researches in this line may give the surgeon more definite basis for action

THE DIAGNOSTIC VALUE OF THE GRUBER WIDAL REACTION

The thorough clinician is careful not to attach undue or exclusive importance to any one or even several symptoms in arriving at a diagnosis, but he correlates all of the evidence, positive and negative, in a given case and considers all of the possibilities, before reaching a definite decision Therefore, when the Gruber-Widal serum-reaction was proposed as a means of diagnosis he knew better than to rely upon it infallibly, and experience showed that the manifestation, which it was appreciated usually does not occur before the fifth or sixth day, occasionally fails to appear in cases of undoubted typhoid fever, that at other times it appears only late, that at still other times it may be present at one examination and absent at another and that now and then it is yielded when there is no real evidence that the case is one of typhoid fever Some of these irregularities in results are related to the dilutions of blood-serum employed and to other details in technique, but apart from this it may be conceded that there are exceptional cases of typhoid fever in which the reaction fails to develop, as well as exceptional cases of other disease in which the reaction does appear There has been some discussion as to whether the reaction is one of infection or one of immunity, but the evidence is really not decisive that it is either Nevertheless it seems likely that it is specific and represents a result of the reaction between the invading micro-organism and the attacked organism A similar specific reaction has been described as belonging also to a number of other bacteria

There has of late become evident in some quarters a tendency to belittle the value of the Gruber-Widal reaction in the diagnosis of typhoid fever but apparently without good reason, if one may judge from the statistics that are reported Thus Dr C F Withington[1] states that the reaction was obtained in all but 10 of the 253 cases of typhoid fever in the Boston City Hospital from May 28 to November 28 1900 The negative decision was based not upon a single examination but upon frequently repeated observations, and as a result of which it was found that the reaction sometimes appeared exceedingly late as late as the twentieth or the twenty-fifth day The reaction was absent in six other cases in which the diagnosis of typhoid fever was made, although the evidence was not complete The method employed consisted in drawing a few drops of blood from the patient's ear into a small section of glass tubing sealed at one end by heat and left open at the other After the serum has separated, one drop is mixed with ten drops of an active culture of typhoid bacilli from twenty-four to thirty-six hours old This mixture is studied side by side with the unmixed culture The reaction is considered positive if immobility and clumping take place in the course of half an hour

Dr G B Shattuck reports from the same hospital, 65 cases seen during the succeeding four months in which a clinical diagnosis of typhoid fever was made and in only three of which the Gruber-Widal reaction was not obtained

SENILE CHOREA

It is not surprising that confusion should arise in the minds not alone of the student but also of the practitioner of medicine from the application of the name chorea to a number of, in part, different affections and there is a distinct opportunity for reform in this direction The designation may properly be retained for the classic disorder first fully described by Sydenham which is an acute, self-limited, probably infectious disease, while other names should be devised for the more chronic disorders variously known as congenital or hereditary or senile chorea, which are associated with organic changes in the central nervous system Spasmodic or convulsive tic is sufficiently distinctive of the conditions sometimes designated habit-chorea and the jerky involuntary incoordinate movements of hysteria require no specific designation Prehemiplegic and posthemiplegic chorea represent merely irritative motor disturbances dependent upon various disorders of the brain

Albuminuria is no longer considered synonymous with nephritis nor spasm with epilepsy, and in the same way, all conditions attended with irregular, involuntary, inco-

1 Ann de l Institut Pasteur

1 Boston Med and Surg Jour May 9 1901 p 442 also JOURNAL A M A xxxvi p 1501

ordinate movement should not be more or less indiscriminately grouped together as chorea Some differences of opinion have also arisen with regard to some of the subdivisions of chorea Thus so-called hereditary chorea and senile chorea are by some considered as different and by others as identical affections The qualification "hereditary" in medicine would seem to be as unfortunate as it is unnecessary, particularly in the field of diseases of the nervous system In the first place, disease as such is not inherited, that which is transmitted from parent to child being merely a certain cellular type and thus at most merely a predisposition to disease, and this is the rule and not the exception In the next place, even so-called "hereditary" disease must begin in some ancestor, and the instances are not few in which no hereditary transmission can be detected The influence of heredity must, therefore, be looked upon as but incidental and in a sense not essential

To the comparatively small number of cases described as senile chorea, H Bischoff[1] adds the report of another The patient was a woman 73 years old, presenting choreiform movements involving the entire left side of the body and persisting for five years until death The movements which rather resembled those of athetosis, were beyond control of the will, and ceased during sleep Speech was interfered with, but intelligence was unaffected There had been no history of rheumatism, there was no cardiac lesion, and there was no knowledge of hereditary taint The symptoms had made their appearance after emotional disturbances, but this, it was thought, may have been a manifestation rather than the exciting factor of the disease Headache, however, was a prominent symptom Tuberculosis of the vertebræ also was present Macroscopic and microscopic examination of the central nervous system after death disclosed no significant lesion, although there were present recent hemorrhages in the optic thalamus, and diminution in the number of ganglion-cells of one-half of the spinal cord such as may be found in the normal cord

1 Deutsches Archiv für Klin Med 69 B, 3, 4, H, p 404

VITAL STATISTICS IN ILLINOIS

As yet vital statistics are very imperfectly registered in most parts of this country and it is a satisfaction to note the enactment of measures that will insure a better record in the future Such a one was passed by the last session of the Illinois legislature, which has just adjourned It provides for the registration of births, allowing, as it should, a small fee for the reporting of the same, and providing penalties for its violation Heretofore the return of births in Illinois has been very defective, but the present law gives to the health authorities the means for insuring a correct registration after this year the law for some reason having been made to go into effect Jan 1, 1902 It is probable that the deficiency in birth reports has been heretofore more largely among the well-to-do classes and native Americans than among the poorer and foreign born At least this would appear probable from the published lists It is to be hoped that American mothers will make a better showing under the new law

THE PATHOLOGIC EXHIBIT AT THE ST PAUL MEETING

This eminently practical feature of the ASSOCIATION promises to exceed both in interest and in size that of last year There will be some exhibits illustrative of research and experimental work Effort has been made by the Committee, with most gratifying success, to secure groups of specimens bearing upon particular phases of pathology Systematic endeavor will be made to demonstrate the collection of specimens to groups of visitors It may be stated without fear of controversy that the Exhibit will prove most entertaining and exercise a potent educational influence upon the meeting The number of exhibitors will almost double that of a year ago They will come chiefly from the states contiguous to the place of meeting, but the south, east west, and even the Canadian profession will have creditable representation The location of the Pathological Exhibit in the Ryan Annex, near the Headquarters, will insure a large attendance The room is seventy-five feet square, has fine light upon two sides, is situated on the fourth floor and has excellent elevator service No member of the ASSOCIATION should fail to visit the Exhibit Aside from the great advantage to be gained by its inspection, it is due the large corps of exhibitors who for the love of medical science, have labored "without money and without price" for the success of this most praiseworthy undertaking

TO HASTEN DELAYED RESOLUTION

While the mechanism of counter irritation in its various forms is not understood, the fact of its usefulness is not to be denied The most reasonable explanation, though it is but indefinite is that an influence, probably of a stimulating character, is exerted reflexly from the surface through the nerves and vessels upon the circulation and metabolism of the diseased area Such an effect may be desired in the presence of a number of torpid morbid processes, such as an unresolved pneumonia, and for this purpose it is not unusual to apply blisters or iodin Dr Charles I Macalister[1] has observed frequently that resolution followed closely upon exploration of the chest with an aspirator needle in cases in which there has been a suspicion of pleural effusion, although only solid lung is encountered, and he considers the subsidence of the temperature and the subsequent clearing up of the consolidated area as not merely accidental Similar results have been observed in cases of distinct croupous pneumonia and of pneumonic consolidation of long duration In carrying out the procedure a fairly large needle or trocar should be employed French clinicians have advised, in order to bring about resolution of chronic pneumonic conditions the excitation of a sterile abscess in some indifferent situation, though preferably in proximity to the affected organ, by means of the subcutaneous injection of oil of turpentine This is thought to effect its purpose not alone through its counterirritant influence but also through the leukocytosis to which it gives rise

1 Liverpool Medico Chir Jour, March, 1901, p 216

THE VERMIFORM APPENDIX THE CONSERVATORY FOR THE COLON BACILLUS

From experiments upon animals Kohlbrugge[1] has learned that when the stomach is empty it may be quite sterile whereas during digestion it is possible to cultivate numberless bacteria from the ingesta The small intestine when empty is also sterile, wherever the ingesta occur there bacteria are also found This periodical cleansing of the small intestine he designates as autosterilization He never found the cecum or colon sterile the bacterium coli commune being the predominating variety and especially numerous in the cecum The cecum is therefore the breeding place of the colon bacilli which are peculiar to the individual and persist from the earliest extra-uterine period till some time after death The cecum is the brood-oven of the body and here develop the bacteria, which are our constant messmates That these bacteria may be of some physiologic importance is not unreasonable The vermiform appendix not subjected to the peristalsis which in violent diarrhea may empty the cecum and colon may serve to maintain the culture of colon bacillus peculiar to the body Instead of being an useless and dangerous organ the appendix may be of great importance in keeping alive our bacterial messmates, which in their turn influence digestion favorably and keep out foreign invaders The appendix, in other words, secures for us stability and permanence of our colon bacilli That much of surgical and of general physiologic importance remains to be learned in regard to the intestinal bacterial flora is not to be doubted but it is not likely that the possible importance of the appendix suggested by Kohlbrugge will lead soon to greater conservatism than now obtains in respect to the removal of this organ

THE "JURY LICENSE AND MEDICAL PRACTICE ACTS

In some western and central states an appeal has recently been made to the courts to reverse the decision of the state boards of medical examination Juries have in some cases found for the plaintiffs and against the board thus introducing a new factor into the question of the judgment of medical qualifications It would seem that a medical practice act, unless declared unconstitutional by the highest court, would be the supreme law on the subject, and the function of a jury would hardly include the giving of licenses to practice medicine An appeal to the courts ought, if possible at all, to be limited to the question of the proper execution of the law by the examining board Some puzzling questions might arise, but when we read of a Montana judge instructing the jury that they were not called upon to determine whether the examination justified the action of the state medical examiners, but they must determine from the evidence whether the plaintiff was qualified to practice medicine, it appears to us that his ruling is open to criticism, even by those who are not lawyers By such a ruling a jury license to practice might become the favorite qualification and the statute practically a nullity If the courts and juries of laymen are to settle the question of medical qualifications we may look for some queer results, and the question naturally arises how would it suit if lay juries were to decide on the merits of candidates for admission to the bar? They are as well fitted for this function as the other Of course this case can go up to the highest court and it is fortunate that it is so, for nothing short of this could be satisfactory after the instruction that a lay jury is the ultimate judge of fitness to practice medicine

FLATFOOT AS A CAUSE OF PARESTHETIC MERALGIA

Since the original description by Bernhardt, in 1895, of a condition attended with burning pain in the distribution of the external cutaneous nerve of the thigh, a considerable number of cases have been recorded Although at times no underlying cause is apparent the disorder must be looked upon rather as a symptomatic manifestation than as a clinical entity It seems likely that changes in the nerve itself which in several places is so situated as to be exposed to the risk of injury, may account for the symptoms in some instances Thus, it may be subjected to mechanical influences at its point of emergence from beneath the psoas muscle, at its point of reflection immediately below the anterior superior iliac spine, in the fibrous canal of the fascia lata, by which it is enclosed, and at its point of emergence from this canal In addition to traumatism, the disorder has been observed in association with syphilis, alcoholism, infectious diseases, pregnancy and gout as well as a number of diseases of the nervous system, such as tabes, general paralysis, hematomyelia Further, J Pal[1] reports six cases in which paresthetic meralgia was associated with flatfoot, and, while he does not contend that this is the only etiologic factor, and he realizes that the affection may be of varied origin he nevertheless believes that simple mechanical injury of the nerve is present in the majority of cases The disorder may arise in an individual previously spare and of slight skeletal development who acquires a certain degree of obesity The sensation of burning pain appears under such circumstances when the patient is erect and walks about, supporting the body principally on the inner aspect of the foot and securing relief in rest and in walking on the outer border of the foot Relief will then also follow appropriate orthopedic measures, such as a suitable support for the arch of the foot The relation between flatfoot and the paresthetic condition is believed to reside in compensatory overaction of the hip-joint as a result of the changes in the position of the foot, with a remote mechanical effect upon the external cutaneous nerve Relief can be hoped for from orthopedic appliances only in recent cases, before structural changes in the nerve have taken place

THE PLAGUE AT SYDNEY

The report of the Department of Public Health of New South Wales on the "Outbreak of Plague at Sydney, 1900," is a very interesting document The fulness of detail, the excellent illustrations the condign discussion, and the prompt publication speak well for the state of organization of the department and for the energy and ability of the chief medical officer, Dr

1 Centralbl f Bakt 1901 xxix, 571 574

1 Wiener Med Woch 1901 No 14 S 665

J Ashburton Thompson The epidemic consisted in the attack with plague of 303 persons between January 19 and August 9, of whom 103 died Of the multifarious branches of work entailed by the epidemic and adequately set forth in the present report particular attention may be directed to the efforts to trace the manner of infection and the mode of spread of the disease It seems to be quite conclusively shown that an epizootic disease among rats preceded the first case which occurred in man, and bacteriologic examination showed that the epizootic disease among the rats was bubonic plague Further that the area over which the epizootic extended was practically co-extensive with that over which the plague was observed in man This epizootic died out at the same time as the epidemic ceased The general conclusion based upon the evidence thus outlined is that "the epidemic was caused by communication of the infection from rats to man" As to the manner of transmission from rats to man, but little is said, as the opportunities for careful investigation of this point were not favorable In seven of the cases distinct marks of flea-bites were noted, and in two cases smears from the little vesiculo-papular lesion showed bacilli morphologically resembling the B pestis Fleas from infected rats were also examined and in one the presence of plague bacilli was demonstrated definitely by means of inoculation into a guinea-pig Should it eventually be established to general satisfaction that plague is communicated to man by means of fleas then it would seem from analogy that there is nothing inherently unreasonable in the theory of a bacterial origin of yellow fever although the disease is transmitted by mosquitoes as shown by the brilliant researches of Reed and his associates From careful consideration of the facts of the Sydney epidemic it also seems clear that the disease was not "catching" in the ordinary sense of the word, and further that it was not communicated in any important degree by fomites Rat-killing was instituted on a large scale, a special rat-catching staff ultimately reported that it had destroyed 38,600, and the grand total killed by authority is 108,308 Of course, private persons killed a great number also It is urged strongly that removal of all conditions favoring harborage and breeding of rats in and near occupied premises be recognized and instituted as an important practical means of protection against epidemic plague This means steady and faithful carrying out of certain well-known details of municipal sanitation, and specific recommendations are made to meet the local conditions in Sydney based upon the principle that plague is diffused by rats "There is no royal road to the prevention of plague" and there is no doubt that the health officers of our large cities may profit much by a careful study of the Sydney epidemic and the experience of those who took active part in the struggle successfully waged against it there

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Trusses in the Fifth Century—Professor V Deneffe, of Ghent, has written several works on surgery and medicine in antiquity, among them "Ancient Dental Protheses," and "A Gallo Roman Surgeon and Oculist in the Third Century" He has recently published an account of some iron trusses found in the tombs at Euville and Devise, dating from the fifth to the seventh century

Medical News.

ALABAMA

Dr Emmet K Moon, Anniston, has been elected physician of Calhoun County, vice Dr Thomas W Ayers, resigned

The proposed hospital in Montgomery secured in two days' work nearly half of the amount required to guarantee its construction

The Medical College of Alabama held its forty second annual commencement in Mobile, April 3, graduating a class of 38 Dr Charles A L Reed, president of the AMERICAN MEDICAL ASSOCIATION, delivered the doctorate address

Southern Quarantine—During the recent smallpox scare in the South, it is said that the mayor of a small town in Alabama took the extraordinary precaution of appointing all the conductors on city and suburban lines as quarantine officers, and all persons coming from adjacent infected districts were required to show a health certificate before being allowed to enter the city

CALIFORNIA

Pasadena Board of Health—The newly appointed Board of Health has organized and elected Dr F F Rowland health officer

Japanese Maiden Graduate—Miss Una Yone Yanagisawa is one of the 28 graduates in medicine in the State University She is also a B A of the class of '98 of the same institution

The death of the white woman in San Francisco on April 25, which was reported to have been due to the plague and mentioned in THE JOURNAL of May 25, was, on investigation, proved not to have been the result of that disease

DISTRICT OF COLUMBIA

John Baudat, Washington, who pleaded guilty to practicing medicine without a license, was released on his own recognizance

John A Dougherty, Washington, was arrested May 13, charged with practicing medicine without a license He was fined $5 which was paid

Casualty Hospital, Washington, has elected Dr John R Wellington, chief of the surgical and emergency staff, and Dr Jesse J Shoup, chief of the eye, ear, nose and throat department

Georgetown University Medical Department held its fifty second annual commencement May 21 and graduated a class of 21 Dr Joseph Eastman, Indianapolis, delivered the address, choosing for his subject "The Evolution of Surgery"

ILLINOIS

Dr John C Corbus has been re elected superintendent of the Illinois Eastern Hospital for the Insane at Kankakee

Dr Frederick C Winslow, Jacksonville, has been appointed superintendent of the Hospital for the Incurable Insane, which is now nearing completion, at South Bartonville, near Peoria

Julia F Burnham Hospital, Champaign, is a beneficiary to the extent of $24,000 by the will of Miss Ida Harris, of which $4,000 is to be devoted to the erection of a consumption ward

Chicago

Dr Harold Jacobsen sailed for Europe May 4, on the *Graf Waldersee*

Dr E C Dudley was appointed a member of the Board of Education, May 27

Dr Evert E Tracy has been appointed physician to the State Penitentiary at Joliet

Dr Norval H Pierce has been appointed otologist to the Illinois Charitable Eye and Ear Infirmary

Dr Joseph C Beck has been elected professor of diseases of the ear, nose and throat, in the Chicago, Eye, Ear, Nose and Throat College

Drs Edward T Dickerman and Charles H Beard have been appointed on the staff of the Illinois Charitable Eye and Ear Infirmary

Marshall Field has given the Chicago Home for Incurables ten lots adjoining the ground now occupied by the home The land is valued between $40,000 and $50,000

Dowie and three disciples have been held to the grand jury by the coroner's jury, pending the investigation of the

death of Mrs H W Judd, whose husband is among the indicted

Hospital Gift Refused—The offer of two Swedish Americans in San Francisco to give $25,000 each for the erection of a hospital in Lake View or other suitable location in Chicago, has been refused by the Swedish Evangelical Mission Board unless the hospital is established in Bowmanville

Dr N Senn, accompanied by Dr D R Brower, expects to sail for Bremen on the Saragossa, July 4 for a round the world trip which he designates "A Race Against the Sun" He goes via Moscow, the Siberian Railway, Vladivostock, Corea, China and Japan and expects to arrive in Chicago about October 1

Dust Street Sprinkling and Health—Last week furnished an object lesson in the necessity for strict and strenuous supervision over street sprinkling Within twenty four hours after the rain ceased to fall the streets were dry but there was no sign of a sprinkling cart until the air was full of dust and the seeds had been sown of hundreds of cases of influenza bronchitis and pneumonia—to say nothing of consumption

Deaths of the Week—Nearly 12 5 per cent fewer deaths were recorded last week than the week previous, and the annual mortality rate of the week was only 12 13 per 1000 of the estimated mid year population It is not probable that the total deaths for the month will much exceed 2000 The deaths numbered 409, of which 51 were due to pneumonia 52 to tuberculosis 35 to heart diseases, 31 to nervous diseases, 30 to acute intestinal diseases and 25 to violence

The College of Physicians and Surgeons granted the medical degree to 160 students on May 28 The doctorate address was delivered by Dr Joseph M Mathews, of Louisville Ky The exercises were followed by a banquet at the Auditorium Hotel, in which 300 alumni of the college participated Dr William A Pusey acted as toastmaster Among the speakers of the evening were President Draper Drs J W Birk Harold N Moyer Alexander H Ferguson and Joseph M Mathews

The Smallpox Situation—The thing most dreaded by the Department of Health is a change in the type of the smallpox if this should occur serious results are inevitable The disease has been so mild that the contagion must be spread to an unknown extent from cases that have not come under observation No person who is not positive as to vaccinal protection can afford to postpone vaccination before the weather gets too hot for the operation and before the disease changes to a malignant character

INDIANA

Fort Wayne Medical College—At a meeting of the faculty of this college, May 16 Dr Christian B Stemen was appointed dean and Drs Grayford M Leslie and Warren D Calvin were made members of the faculty

To test the medical law, a magnetic healer of Bedford has been arrested charged with practicing medicine without a license A motion was made to quash the indictment, but in the circuit court the medical law was sustained

Indianapolis is non liable to non paying patients treated at the City Hospital for any injuries they may suffer through the negligent and unskillful treatment of the hospital surgeons The Appellate Court has so decided in affirming a judgment refusing Josie F Williams the damages she asked for alleged malpractice at the hands of one of the internes at the hospital three years ago

Qualifications of Osteopaths—The State Board of Medical Registration and Examination has adopted the following resolution Whereas by the amendments of 1901 to the medical act the State Board of Medical Registration and Examination may grant limited certificates which will authorize the proper clerk to issue a license to practice osteopathy only and whereas it is provided by the law that 'such certificates shall be issued on the same terms and conditions as others, except that the applicant therefor shall not be required to pass an examination in materia medica nor shall the college from which he presents a diploma be required to conform to the standard fixed by said board as to instructions in materia medica, but such college shall so conform in all other branches of instruction' therefore 'Resolved, That all applicants for registration to practice osteopathy in the State of Indiana and the colleges from which they procured their diplomas must comply with the schedules of minimum requirements in force at the time of application except in so far as pertains to materia medica"

MARYLAND

Dr I Edmondson Atkinson has been appointed a member of the State Lunacy Commission

Dr Irving J Spear, for the past year resident physician at Bay View Hospital Baltimore, left May 29, for a year's study in Berlin and Vienna

Dr C L G Anderson, major and surgeon of the 29th infantry arrived at his home Smithsburg, Washington county, from the Phillippines May 21

The Woman's Medical College, Baltimore held its twentieth commencement May 31 and graduated 7 women, Lois Jones, Pittsburg taking the highest honors

Mr Edward H Hume, who graduates next month from Johns Hopkins has been awarded the Garrett international fellowship in pathology at Liverpool, lately endowed by Mr W W Johnson for the study of tropical diseases Mr Hume's appointment is especially appropriate, as he expects to practice medicine in India where he has lived for many years

NEW HAMPSHIRE

Dr Russell Wilkins, Concord has been chosen president of the Concord Board of Health

Hampton is the latest town to object to the compulsory vaccination of school children The objection is on the ground that as the disease has never appeared in the vicinity, vaccination is unnecessary and the order arbitrary

A national bank at Keene is reported to have secured a sterilizer through which all money received at the bank is to pass The reason for this precaution is the prevalence of scarlet fever in the town The report however, does not refer to the sterilization of the hands which handle the money, nor is it stated whether or not the money is first sterilized and then handled or vice versa

Examination for License to Practice—The regent of the State Boards of Medical Examiners announces that the next examination for licenses to practice medicine in the State of New Hampshire will be held at the State House Concord, on Tuesday and Wednesday June 11 and 12 1901 beginning at 8 o clock a m All unlicensed physicians who were not in practice in this state on and before March 16 1897 must pass the examinations in order to receive a license to practice legally their profession No licenses issued by states, or diplomas from medical colleges are endorsed by the regent in place of examination with one exception namely graduates from Dartmouth Medical School may receive a certificate on presentation of diploma, if said diploma shall have been issued between the enactment of the medical law March, 1897 and Jan 1 1903 All information regarding the examination will be given by the Department of Public Instruction State Library, Concord

NEW JERSEY

Dr Samuel A Helfer, Hoboken has been unanimously re elected president of the local board of health

The County Hospital at Mount Holly on May 17, was struck by lightning which set fire to a room and frightened the patients The flames were extinguished before much damage was done

Smallpox Still Prevalent—Smallpox which broke out some time ago in Gloucester is still prevalent there On May 20 another new case was taken to the municipal hospital The public schools, which it was hoped would be opened on May 20 are still closed for an indefinite period On May 21, one patient died of the hemorrhagic form and on May 23 two other persons perished Fearing that the disease might get a foothold in Camden the health authorities of that city have placed a partial quarantine against Gloucester This order will prevent undertakers from going to Gloucester and returning with their vehicles The order was issued by the board of health and signed by Dr H H Davis, the president and Eugene B Roberts, secretary During the past week a case of smallpox developed in Camden and it is believed the patient contracted the disease in Gloucester, where she had visited A few days ago Medical Inspector Leavitt of Camden deported a boy to his home in Gloucester and it is said that the boy has since developed smallpox

NEW YORK

Dr Harriet M Doane, Fulton sailed on the *Teutonic*, May 29, for a year's study in the hospitals of Europe

Dr H R Bedell, Waterviet was the successful candidate in the examination for interneships of the Ellis Hospital, Schenectady

Dr John Archibold has been re appointed health officer of Cohoes, on a salary of $900 to which is added a monthly allowance of $30 for medicines

New York City

Governor Odell has appointed Joseph Simonson, of Richmond County, as quarantine commissioner of the port of New York in place of Hugh McRoberts

Smallpox —This disease continues to be very prevalent, and, to make matters worse, it has been charged that two physicians have been guilty of deliberately violating the law and jeopardizing the public health by concealing cases of the disease Those so accused have been summoned to appear before the board of health and explain, and if there is a proper foundation for these charges, they will be prosecuted A nurse in the ward of the Harlem Hospital has developed the disease, and in consequence one physician, two nurses and sixteen patients are quarantined

Mount Sinai Hospital —The new edifice for the Mount Sinai Hospital, the corner stone of which was laid May 22, in the presence of several thousand persons, will cost about $1,335,000, and is to be completed in two years The site alone cost $532,000 There will be ten distinct and absolutely fire proof buildings, connected by covered corridors, each building having five stories The medical and surgical pavilions will each accommodate 160 beds, and there will be a children's ward of 60 beds The building at present occupied by the hospital was erected in 1870

Another Dowie Death —J Luther Pierson, who has been placed on trial on the charge of wilful neglect to procure proper medical attendance for his 2 year old daughter, in consequence of which she died has been sentenced by Judge Smith Lent to pay a fine of $500 or to imprisonment for 500 days The case was tried by jury, and the latter in bringing a verdict of guilty added a recommendation for mercy Mr Pierson declined to pay the fine, and said he would appeal the case, asserting that it was an infringement of his constitutional rights to hold any religious belief he desired

The Smoke Nuisance —Although soft coal continues to be used more and more, and the smoke nuisance is assuming unpleasant proportions, the inspectors of the Health Department declare that they are almost powerless in the premises On two occasions the president of a certain brewing company has been arrested on the charge of maintaining such a nuisance in open violation of the law, but in the face of very complete evidence the police magistrates have seen fit to discharge him The same farce is repeated in other cases, so that not only the inspectors but the legal counsel of the department have declared their inability to cope with the problem unless the police courts are so reformed that political "pull" will not have much influence

OHIO

Bethesda Hospital, Cincinnati, was dedicated, May 16, free of debt

Dr Philip S Rieg, Toledo, returned May 18, from a two months' pleasure trip in Europe

Dr William Knight, Cincinnati, sailed for Glasgow on the *City of Rome*, June 1 He expects to spend four months in visiting European hospitals and clinics

The Mayor of Cleveland, forgetting that medieval times are past has promulgated a decree that, while he is mayor, there shall be no compulsory vaccination in his city

Opening of the Branch Hospital for Consumptives —On May 16, the board of Trustees of the Cincinnati Hospital formally opened the Branch Hospital for Consumptives at Lick Run Patients were first received at this institution in 1897, but only lately large appropriations have made the affair the success it is About two hundred visitors were present One of the important features is the establishment of solaria in connection with each of the new buildings so that the patients are enabled to take sun baths even in winter The establishment of separate buildings is to keep apart the patients afflicted with incipient phthisis, and those with the graver forms of the disease After an inspection of the building, a banquet was held and speeches were made by Mr Bennekei, chairman of the Finance Committee of the Board of Legislation, Drs Frank W Hendley, N P Dandridge, and T A Reamy Dr A B Isham, of the board, acted as toastmaster

PENNSYLVANIA

New Board of Health for Norristown —On May 21, a new Board of Health was appointed by the town council, to replace the members who left two weeks ago The new board is as follows Drs Alfred H Read, James Fennel, Joseph S Rambo, James Wilkinson, and B F Whitby

Smallpox is Rampant —It is said that in the region of Newburg, to Roxbury and Edenville, and in Franklinville, in Franklin County, nearly 30 cases of smallpox have occurred within the past month In one family 8 persons have been affected A public funeral was held over the death of one of these persons and hundreds of persons attended It is stated that some of these cases had been pronounced Spanish measles or Philippine itch In Shippensburg, 8 cases have been reported In Larksville, on May 24, 4 new cases were reported The various lodges have been advised not to hold meetings during the existence of the malady

Philadelphia

Dr Walter Wyman, Surgeon General, U S Marine Hospital Service, was tendered a reception on May 23, by members of the Philadelphia Medical Club Upwards of 150 guests were present

Milk Investigation —The Philadelphia Pediatric Society has again appointed a committee to examine into the condition of the milk sold in this city, to be composed of the following Dr C J Marshall, veterinary inspector, Dr M V Ravenel, bacteriologist, and Dr Henry Leffmann, chemist

The Medico Chirurgical College held its annual commencement at the Academy of Music on May 24, when 69 candidates received their degrees A banquet was tendered the graduates on behalf of the Alumni Society on the evening of May 23 The class day exercises were held in the clinical amphitheater on May 23, when ex Governor Robert E Pattison addressed the graduates

Smallpox —Since smallpox has been so widespread over the State of Pennsylvania and a portion of New Jersey the health authorities of this city are taking precautions to prevent it getting a firm foothold here A joint letter from the boards of health of both Camden and Philadelphia was recently submitted to the board of health of Gloucester asking it to take the necessary steps to stamp out the disease

Anniversary of Class of '76 —During the commencement week exercises of the University of Pennsylvania next month it is purposed to celebrate the 25th anniversary of the 1876 graduating class of the department of medicine with a dinner on June 11 At that meeting a permanent organization of the class for the benefit of its alma mater will be effected The committee in charge consists of Drs Charles A Oliver, William H Klapp and J Francis Walsh

Interneships —On May 23 the Board of Charities and Corrections passed a resolution providing that the list of eligible applicants for positions as resident physicians of the Philadelphia Hospital (Blockley) be submitted to the authorities of the different medical colleges, namely University of Pennsylvania, Jefferson Medical College Medico Chirurgical College, and the Woman's Medical College, and that the first three of these be permitted to name seven appointees each, and the last named three, subject to confirmation of the board

Epidemic of Typhoid Fever —A mild epidemic of typhoid fever has been prevailing for several days in West Philadelphia north of Market street, and west of the Schuylkill river The number of cases have gradually increased until its extent has become quite noticeable Of the 102 cases reported in the city last week 40 per cent were said to have occurred in the Twenty fourth and Thirty fourth wards This entire section of the city receives its water supply from George's Hill in Fairmount Park The disease has for the most part been confined to the district north of Market Street, while few cases have been reported south of that street, a locality which derives its drinking water from the same source It is now believed that the increase of typhoid may have been caused by polluted milk or defective sewage Medical inspectors have made an investigation of the Belmont pumping station, but nothing has been found For the week ending May 25, fifty three new cases were reported in this district

GENERAL

Smallpox in Alaska —There has been considerable excitement at Skaguay over the epidemic of smallpox in Southeastern Alaska Quarantine has been declared against Sitka and other points and vaccination is going on everywhere in that country Since January there have been over one hundred cases at Sitka

Hospital Corps Company of Instruction, Hospital No 3, Manila —The third class of the Hospital Corps Company of Instruction of the Division of the Philippines, U S Army, held its graduating exercises March 27 The faculty of the

Company of Instructions consists of the following Major John S Kulp, U S A, Captain Najeeb Saleeby, A A surgeon, U S A, Capt Jerome B Thomas, A A Surgeon, U S A Lieutenant John C Constable, 46th Infantry, U S V, Lieutenant Clarence B Millhoff, asst surgeon, U S A, Lieutenant Walter D Webb, asst surgeon U S A, and Lieutenant William J Lyster, asst surgeon U S A Out of a class of fifty one, nineteen passed the examination and received diplomas Col Charles C Greenleaf, asst surgeon U S A, Chief Surgeon Division of the Philippines delivered the address to the class, and gave a brief history of the hospital corps Lieut Lyster, commanding the Corps of Instruction, gave a practical demonstration of what had been taught during the course, including first aid, bandaging application of temporary splints, improvised field hospital, ambulance work surmounting of obstacles, travois, etc The diplomas were presented to the class by Major General Arthur MacArthur, U S A, Military Governor of the Philippines Together with the report of the graduating exercises Major Kulp has forwarded a schedule of instruction which includes a fourteen weeks' course of drills, dictation, spelling, arithmetic, hygiene, first aid, minor surgery, elementary materia medica, nursing, elementary anatomy and physiology, pharmacy, clinical surgery, diet cooking, signal drills the application of bandages and splints, and field work The army is to be congratulated on the successful issue of the class of instruction The continuance of such courses of study for the Hospital Corps would result in greatly increased efficiency of the corps and in incalculable good to the sick and wounded

Capt Saleeby Lieut Constable Lieut Lyster Lieut Webb
Capt Thomas Maj Kulp Lieut Millhoff

Exhibit of the Medical Department, U S A, at the Pan American Exposition —A feature of the Exposition which will be of much interest to medical visitors is the exhibit of the Medical Department of the Army As lack of floor space precluded an indoor display of sufficient scope to creditably represent the department, the exhibit has been confined to a 100 bed field hospital, equipped to take the field with an infantry brigade This exhibit, in charge of Capt. E L Munson assistant surgeon, U S A, is centrally located immediately south of the Government Building, and visiting medical men are cordially invited to inspect its equipment and make it their headquarters on the Exposition grounds The hospital is completely equipped down to the last tent peg and authorized ounce of supplies, and demonstrates the resources of the Medical Department, in respect to the brigade hospital unit, in quantity, size and capacity as well as in variety and quality The exhibit is unique and particularly attractive by reason of the fact that the supply table of the Medical Department has been entirely revised within the past year and scarcely an important article of equipment is shown which has not recently been adopted by the Medical Department The exhibit thus represents the latest advances in every branch which has to do with the care of the sick and wounded in the field and the exhibit, as a whole, including tentage, camp furniture, instruments, dressings, medicines, hospital stores, cooking and messing facilities, represents a more modern and complete equipment than is possessed by any other army in the world The transportation necessary to move the hospital with marching troops, together with its quota of ambulances—the latter of the new 1900 model—is also shown Besides the equipment of the field hospital proper, the exhibit includes an enlisted personnel of twenty four men of the Hospital Corps, U S Army, who act as attendants at the exhibit and also give an attractive series of exhibition exercises in litter drill, transportation of wounded, first aid and bandaging, the method of establishing field hospitals, etc The exhibit, while particularly valuable and instructive to medical officers of the National Guard, will prove of much interest to practitioners in civil life Its completeness of equipment and excellence in respect to *personnel* reflect much credit upon the authorities of the Medical Department, and hence upon the profession at large, whose official representatives they are

CANADA

Unpaid Assessments —Ontario physicians who have not responded to the demands of the Medical Council to pay all arrears of assessments have had their month of grace extended thirty days After June 10 prosecutions will be commenced Dr Pyne the registrar states that all but 300 of the 2500 have paid up to date

Financial Sympathy in Alleged Malpractice Suit —Some time ago mention was made in these columns of a case of suit for malpractice against Dr J M Conerty, of Smith's Falls Ont The statement has lately been circulating that Dr Conerty had compromised for $600 This is incorrect He is still fighting the case and with the approval of his fellow practitioners throughout the Dominion The Montreal Medico Chirurgical Society the Toronto Clinical Society, Dr R W Powell, of Ottawa and others are supporting him with their financial sympathy

Grave Robbing Case —A third year student in medicine at Queen's University, Kingston, was arrested in February last having the dead body of a woman in his possession presumably for dissecting purposes The case against him was disposed of on April 22 when the judge of the County Court of Peterboro had him discharged on the first count, the prosecution failing to prove that he had opened the grave On the charge of indecently interfering with a dead body the defendant was find $200 or in default, one year in gaol For this misdemeanor the Ontario law provides five years in the penitentiary or a fine at the judge's discretion The student's previous good character saved him from gaol This is the first case of its kind to come before the Ontario courts

Winnipeg General Hospital —The regular monthly meeting of the board of governors of the Winnipeg General Hospital took place in the hospital building on the afternoon of May 24, when the report of the special committee appointed to secure the services of a pathologist and bacteriologist, was received and adopted The Committee reported that they had arranged with Dr Gordon Bell of Winnipeg, the provincial bacteriologist, to assume charge of this work at the hospital at an annual salary of $500, he to appoint his own assistant, who was to be present at the hospital daily for such hours as might be found necessary for carrying on this work Dr Bell will assume his new duties on June 1 Dr Chestnut, the medical superintendent, resigned and Dr Jasper Halpenny, who has been acting as assistant medical superintendent for the past four months was promoted to the position of superintendent His appointment will be for one year dating from June 1

Ontario Vital Statistics —The monthly report of the provincial board of health for the province of Ontario shows that there have been 2427 deaths in April as compared with 2525 in March and 2311 in April of last year The deaths from contagious diseases were as follows consumption, 236, diphtheria, 39, scarlet fever, 17, whooping cough, 14, typhoid fever 12 The deaths from consumption and diphtheria show increase, the figures in April, 1900, being respectively, 203 and 24 It will thus be seen that the mortality from consumption as mentioned in THE JOURNAL'S editorial of May 25 is not by any means one fifth of the deaths in the province of Ontario One-tenth appears to be nearer the mark, and it is certain that several, if not all of the provinces, can produce as good, if not

better showing than this The report as regards smallpox shows that there have been over 600 cases during the present outbreak, with only six deaths, this is a death rate of one per cent of those afflicted

Public Works Health Regulations—The Canadian Government has adopted a new set of regulations for the preservation of health and the mitigation of disease among persons employed in the construction of public works Some few months ago an inspector was appointed to enforce the act respecting the employees on public works and these new regulations define his duties He is to act as chairman when present at meetings of health boards, to notify the Minister of Agriculture and the secretaries of the provincial boards of health wherein public works are being carried on of all cases of infectious diseases Any person or persons or companies constructing public works must engage a medical officer for each five hundred employees and such medical officer must be properly supplied with medicines and a means of conveyance The health board upon such works is to consist of the inspector, the medical officers and the government engineer, and when there is no hospital within reasonable distance of the work the contractors must establish one They must also provide temporary hospitals sufficient to accommodate at least six patients, or more if necessary, with a medical officer, nurses and proper hospital supplies Suitable accommodation must also be provided for isolating infectious diseases The regulations provide for fines for breaches of or non observance of the rules

Montreal General Hospital—The annual meeting of the governors of this institution was recently held, and the committee of management has determined to put a stop to the annual deficits After June 1, a charge of 10 cents is to be made for the first bottle of medicine in the out door departments and thereafter 5 cents for each bottle Dr John McCrae has been appointed resident assistant pathologist and Dr von Eberts, the medical superintendent, has had his term extended to May 1 next his staff to consist of ten house surgeons and a lady superintendent with seventy nurses A complete new sterilizing apparatus has recently been put in at a cost of $500 Dr Finley the secretary, reported that the expenditure for the past year was $84,280, income, $75,994, indicating an excess of expenditure of $8286 for the year, which added to the deficiency of last year, $14,149, gives a total debit balance of $25,000 nearly Dr Finley also presented the report of the medical work for the year There were 250 deaths, of which 105 occurred within three days of their admission The death rate had been 8 85 per cent or, excluding the 105 cases dying within three days of their admission, 5 13 per cent The average number of patients in the wards was 178, an increase of 11 as compared with the previous year The average number of days in hospital per patient was 22 3, and the aggregate number of days in the hospital for all patients was 63,018, an increase of 2946 as compared with 1899 90 The average cost per patient per day had been $1 37, as against $1 35 in the preceding year In the out door department there were 41,606 consultations, being an increase of 4,233 over the previous year Of these there were treated in the medical department 12,431, surgical 14 378, eye and ear, 6099, gynecologic, 1495, nose and throat, 3068 dermatologic, 1861, dental 144, emergency, 2130

FOREIGN

Plague in Cape Town—For the two weeks ending May 25, there occurred 56 cases and 33 deaths, making since the commencement a total of 666 cases and 308 deaths The deaths include 55 Europeans Judging by the returns, the disease seems to have reached its maximum and to be on the decline

New Russian Medical Journal—In the place of the Russian medical journal, *Vratch*, which suspends publication this year, the same publishers announce a new medical journal, *Russky Vratch* to follow in the footprints of its predecessor Professor Podwyssotski is to be the editor in chief The new journal is to be dedicated to the memory of Manassein, the founder of the original *Vratch*

Smallpox in Glasgow—The epidemic of smallpox is rapidly dying out On May 13 there were only 75 patients under treatment, and during the past fortnight there were only 28 fresh cases compared with 92 of the preceding The total number of cases has now reached 1823, of which 232 were fatal It is estimated that the extra expenditure of the city in connection with the epidemic will be $210,000 to $240,000 This is made up as follows "Treating patients in hospital and isolating "contacts," $25 000 to $30,000, erecting temporary wooden pavilions and extending reception houses $35,000 preventive measures—including vaccination and revaccination—$150,000 to $175,000

Plague in India—For the week ending April 20 there were 6304 deaths from disease in all India, against 8429 of the previous week, again a considerable decrease In Bombay there were 459 deaths—a decrease of 222, compared with the former week A most satisfactory feature is that in the heart of Bombay there is for the first time for some months a considerable area from which the plague has disappeared In Calcutta the present season's outbreak is nearing an end Disinfection appears to have failed Notwithstanding the extraordinary efforts during the intermission of the last year to thoroughly disinfect the slums of Calcutta the present recrudescence has been higher by about 50 per cent than any previous one Cases have repeatedly occurred in houses which have been disinfected repeatedly, so that little or no good appears to have resulted from the great expenditure on disinfectants The effective disinfection of native houses seems impossible At the end of March the weekly mortality rose to over 1100 in Calcutta, but in two weeks it had sunk to just one half

Plague in Sydney—A fatal case has occurred at the quarantine ground The patient was a man on board a troop ship, which had just arrived from Cape Town, where it had been for two months On the voyage a large number of rats died The patient had been engaged in the hold of the ship assisting in removing the bodies of the rats On arrival at Sidney the vessel was quarantined Bacteriological examination showed that the rats were affected with plague bacilli The ship was thoroughly fumigated and a large number of rats were killed The period of quarantine—ten days— had just been completed and orders had been given for the release of the vessel when this man suddenly developed suspicious symptoms which proved to be plague The board of health of Sydney is actively engaged in securing the cleanliness of every quarter of the city Regulations have been framed that metal discs shall be fixed to ropes making vessels fast to wharves and that gangways shall be drawn up at night time so that rats shall be prevented from leaving ships A penalty of $500 is attached to breach of these regulations

Dr John Cavafy—Dr John Cavafy, consulting physician to St George's Hospital, died on the 28th ult Though born in London, he was of Greek descent He graduated at the University of London in 1867, and in the following year became a member of the Royal College of Physicians He was appointed demonstrator of histology at St George's Hospital, and showed great teaching abilities He became in succession lecturer on comparative anatomy, medical registrar, lecturer on physiology, assistant physician, and physician and dermatologist He was an excellent linguist and an artist of no mean capacity His beautiful water color drawings illustrating "Symmetrical Congestive Mottling of the Skin"—a condition described by him in the "Transactions of the Clinical Society"—adorn the museum of his hospital He was not a voluminous writer, but something much better—one who wrote little but all of which was valuable The following are a few of his most important papers "Ameboid Movements in Leukemia," "Eruption after Salicylate of Soda," "Erysipelas with Low Temperature," "Urticaria Pigmentosa," "Sciatic Nerve Stretching in Ataxia"

LONDON LETTER

Thoracic Resonance in Left Handed Persons—At the Clinical Society, Sir Hugh Beevor exhibited two healthy left handed adults to illustrate the normal thoracic resonance in left handed persons They proved that the lesser resonance in right handed persons was due to greater muscular development on that side He remarked that the absence of emphasis on this point in text books leads to mistakes in diagnosis In these cases the pulmonary resonance did not rise so high above the left clavicle as above the right

Sir Frederick Treves—Mr Frederick Treves has had the honor of knighthood conferred upon him by the King in person, who also invested him with the insignia of a Knight Commander of the Royal Victorian Order Recently he was appointed Honorary Sergeant Surgeon to the King He was awarded C B for his services as consulting surgeon in the South African War But entirely apart from his services in the war Mr Treves has earned sufficient distinction as a surgeon and surgical writer to entitle him to the highest distinctions from his sovereign His works on "Intestinal Obstruction" "Surgical Anatomy," "Operative Surgery," and the "System of Surgery" edited by him have long been standard books in the profession

Antivivisectionists Meet —The annual meeting of the National Antivivisection Society has been largely attended and the gathering included some very influential people—peers, bishops and other church dignitaries A well known lawyer, one of the most prominent of the antivivisection controversialists moved a resolution advocating the total abolition of vivisection as morally wrong He said that vivisectionists did not defend the torturing of animals but alleged that no tortures were inflicted But such plausible assurances were he insisted false The Archdeacon of Westminster described some laboratory experiments when he was interrupted by a lady, who said 'Oh we can t bear this!" to which he replied You have not to bear it These poor animals have to bear it" The resolution was carried unanimously

Laparotomy in Ascites —At the Clinical Society Mr Leonard Bidwell described three cases illustrating the value of this procedure In the first the liver and omentum were stitched to the abdominal parietes after evacuating the fluid The patient recovered and had no return of the ascites She remained well for nearly six months when she suddenly died from hematemesis the result of alcoholic excess In the second case a child, aged 9 had ascites which had been preceded and was accompanied by albuminaria and abdominal pain There was also general anasarca He had been tapped ten times and the fluid reappeared very rapidly He is now quite well but for a trace of albuminaria In the third case, also of a child, aged 9 the ascites was due to cardiac disease, and there was general anasarca and enlarged liver In this case, too, there was no return of the ascites and the child was able to get about but died of syncope shortly after returning home

Outbreak of Typhoid Fever Due to Fried Fish —A report has been presented to the London County Council dealing with outbreaks of typhoid fever which occurred in September last in Southwark Lambeth and Kensal Town Great difficulty was at first experienced in tracing the disease to its origin until one day light was thrown on the matter when the mother of one of the patients was questioned as to what food her boy was in the habit of taking remarked The only thing he ever did eat in this house'—for her son did not live in the infected area but only visited it—'besides bread and butter was a bit of fried fish This led to further inquiry, and it was found that most of those attacked had consumed this article of food, and moreover, had obtained it from a particular shop It was found that in Southwark, if this shop were taken as a center and a circle of a quarter of a mile radius drawn round it practically the ground in which the exceptional incidence of typhoid fever occurred was covered, and the cases were more thickly distributed towards the center Out of 10,500 persons eating fried fish from the shop, 101 became infected, while there were only 11 cases in 14 500 persons not dealing at the shop Again, in the adjacent district of Lambeth, where there were some 45 cases, only one occurred in which fried fish from a suspected source was not eaten How the fried fish became a source of contagion has not been ascertained

Paracentesis of the Pericardium —At the Liverpool Medical Institution, Dr Glynn described the following case A boy aged 17 had pleuropneumonia eighteen weeks before admission to hospital, from which he never recovered During the illness clear fluid was aspirated from the left side On admission there was dyspnea, the respirations being 30 when he was propped up in bed The pulse was 120, soft and irregular There was periodical dullness 2½ inches to the right and 5 inches to the left of the middle line at the level of the nipple, and lower reaching the axillary line The apex beat was absent, and the heart sounds were feeble The temperature was normal At the end of a fortnight the pericardium was aspirated and 14 ounces of clear fluid were removed The urgent symptoms were relieved, the apex beat became perceptible and pericardial friction sounds were audible for the first time In a month the fluid reaccumulated and 23 ounces were removed A mercurial manometer was used on this occasion to estimate the pressure of the fluid in the pericardium by means of a T tube behind the aspirating needle At the commencement of aspiration the pressure was +2 1 cm , at the end —2 cm No organism was discovered in the fluid The pericardial friction sounds again returned but they disappeared in a week or two, and there was no evidence of recurrence of effusion The patient left hospital apparently well at the end of March It has just been reported that the effusion has returned

The Registration of Midwives —Last year a bill for the registration of midwives passed its second reading in the House of Commons by a large majority and went almost unaltered through the standing committee on law It provided that all women who attend cases of natural labor for gain should undergo a course of training in midwifery, pass an examination and be placed on an official register The value of such a measure is obvious The majority of the women of the country either can not afford to pay for the services of a medical man or for other reasons are attended by midwives, most of whom are untrained and ignorant England stands almost alone among the countries of Europe in allowing any woman however incompetent to practice midwifery The Registrar General s report shows an annual death rate of women in childbirth in England and Wales of between 3000 and 4000 Puerperal fever is responsible for between 2000 and 3000 of these deaths When a midwife coming from a case of puerperal fever is warned both by the doctor and by the coroner, there is power to prevent her attending another confinement Again and again a midwife has been proved to leave a train of deaths behind her Further unskilled aid during the puerperal period is responsible for the blindness which results from ophthalmia neonatorum The bill for the registration of midwives was warmly supported by the leading obstetricians of the country other eminent medical men and by the coroners Unfortunately it received considerable opposition from the rank and file of the profession The cry was raised that an inferior and imperfectly trained order of medical practitioners was being created whose recognition would be fraught with danger to the puerperal woman who requires and should receive the highest skill and not knowledge which could be acquired in a few months training in a lying in hospital

The Late Sir B W Richardson F R S —A remarkable work entitled "Disciples of Esculapius" by the late Sir B W Richardson with a life of the author, by his daughter, has just been issued The author was perhaps the most distinguished medical advocate of total abstinence He was a very voluminous writer, and, like Mr Jonathan Hutchinson, published a quarterly medical journal entirely written by himself But the value of his work lies in its scholarship and literary qualities rather than in any scientific observations made by him In the present work his daughter touchingly describes his last hours in an episode which recalls those of the venerable Bede "Take your pen please, I will add another chapter to Vita Medica' '—his last book "Head the page 'A Last Word'" He then dictated a few lines 'Yes, Sir Benjamin, that is all—the book is finished" So it was, and so was the life of the author Two hours later he was seized with apoplexy, from which he died after two days of unconsciousness The life of the immortal Harvey is briefly sketched A most interesting account is given of the life of Keats The idea suggested by Byron that he was 'snuffed out" by an article in *Blackwood* or the *Quarterly Review* is declared to be simply nonsense His death was due to consumption, and perhaps expedited by his own imprudence The life of Walsley, the courageous founder of the *Lancet*, is full of interest Among the many reforms due to him was the abolition of flogging in the army He was coroner for Middlesex and succeeded in obtaining a verdict of murder in the case of a soldier who had been whipped to death This made the repetition of such a crime impossible Another medical reformer, Benjamin Rush is described as the "American Sydenham" "He was amongst the first to oppose the committal of murder by the state for the purpose of setting an example to individuals not to murder '

Correspondence

Individual Rights and the County Medical Society

SPOKANE, WASH, May 17, 1901

To the Editor —When a medical man or woman is a graduate of a reputable medical college and has complied with the laws of his state, regulating the practice of medicine, and is apparently eligible in every way for membership in a county society, if for a trivial reason he is denied admission to his county society, an injury is done that is far reaching in its consequence, both to him, to the local society, to the state society and to the AMERICAN MEDICAL ASSOCIATION, and it tends to foster and keep alive a general opinion that county societies as well as the state and national, are conducted for the benefit of the few, and that in place of these organizations

being scientific primarily, they have degenerated into social and mutual admiration societies

By denying a person admission into the county society, one is denied admission into the state and national association This state of affairs could hardly have been intended when the laws of these organizations were first instituted I suspect the very respectable minority of the profession, if not a majority, would welcome some plan by which this condition could be altered, and by so doing have many energetic and capable medical men inside of these organizations, and thereby help to relieve the demoralized state into which the profession has fallen in many sections of the country

It should not be possible for a county society to cast an unalterable stigma on a member of the profession, while at the same time he has no means of defending himself Our general law convicts no one without a fair trial by jury, and the applicant for membership in a county society should have the same privilege

I have no axe to grind in bringing this subject forward, as I am a member in good standing in both my county and state societies, and am eligible to membership in the AMERICAN MEDICAL ASSOCIATION One the contrary I believe I am acting for the good of the whole profession in making an effort to have our societies placed on a solid and equitable foundation

I have been steadily engaged in practice for over thirty one years and have always taken an interest in medical society work In the natural course of events, I will, in a few years, step down and out, and if I can in a small way help to start a movement that will be of benefit to the profession in general, I will feel amply repaid

The remedy I would suggest—the national association at its meeting soon to take place could profitably take up this subject, and by discussion secure a general opinion—is for the AMERICAN MEDICAL ASSOCIATION to require each state and county society to be chartered, then provide that an applicant shall have the right of appeal to the state and national societies in case of rejection There is no doubt but there are many among the ablest in the profession, who are outside of medical organizations, and who claim that they have been deprived of a right, and without their side being allowed a hearing H G MAUZEY, M D

Antiseptic Treatment of Smallpox

HOUSTON, TEXAS, May 21, 1901

To the Editor —THE JOURNAL of May 11 contains a communication from Dr A Bryan, Detroit Mich, in which he claims to be "the original author of what may aptly be termed the antiseptic treatment of the disease (smallpox)" The date of the publication of this theory and practice in regard to smallpox is given as 1895 This theory and practice may have been original with Dr Bryan but in March, 1894, this same treatment and theory was thoroughly presented in the *Texas Sanitarian*, as originating with Dr I C Osborne, of Cleburne, Texas Dr Osborne, however, was not the first physician to publish this theory In August, 1896, I had the pleasure of receiving from Dr J Kornitzer of Socorro, N M, a pamphlet published by him in February, 1880, at Cincinnati, Ohio, in which he set forth the same views as Dr Osborne, and that were, later, set forth by Dr Bryan

The *Texas Sanitarian* is now the *Texas Medical News*, so if Dr Bryan cares to look into the subject further he can obtain the desired information from the aforementioned journal of Austin, Texas Very truly, S C RED, M D

[Several other communications have also been received relative to this matter, the others giving personal experience with no references —ED]

A Suggestion to Preparatory Schools Regarding Morality from the Common sense Standpoint

NEW HAVEN, CONN, May 23, 1901

To the Editor —The prevention of venereal diseases is an important subject Legalized prostitution has its advantages and disadvantages, but the teaching our young men the results of common venereal disorders, has never been attempted in the curriculum of our preparatory schools If an obligatory course of lectures on the common complications of gonorrhea, chancroid and syphilis were to be given in our large schools where young men are prepared for the universities, it seems as if it might have much weight

The lectures should be given by a physician of experience and should cover the common dangers incident to the disorders, viz etiology, symptoms complications, and sequels If these lectures were delivered to the graduating class of the preparatory schools, it might have a good effect on the future actions of its members

The lectures should not be intended to intimidate men, but simply to present morality from its common sense standpoint if nothing more

To day men are more enlightened than ever Why not break down the so called false modesty and educate our young fellows in the real dangers, as well as enlargement of their muscles Men at college are influenced easily as a rule, if matters are set clearly before them, and if they knew beforehand, in most cases they would not make these mistakes

G TOTTEN MCMASTER, M D

Anesthetization During Sleep

NASHVILLE TENN, May 20, 1901

To the Editor —If the anesthetization of children during sleep is of medicolegal interest I can add one case to the three reported by Dr Paugh in THE JOURNAL of May 18 A boy of 18 or 20 months was brought to the clinic of Dr J A Bodine, of the New York Polyclinic for circumcision The child was found to be asleep in the mother's arms and the gradual administration of chloroform was begun without disturbing its slumbers Complete surgical anesthesia was finally produced without any sign of irritation or symptom of awakening Recovery from anesthesia was rapid, the child being in much better humor for having been spared the fright and shock of forced anesthesia The procedure is uncommon, but by no means impossible or even difficult of achievement

W C WELBURN, M D

Memphis in 1902

The Memphis Medical Society has after thoroughly canvassing the situation through proper committees, unanimously voted to invite the AMERICAN MEDICAL ASSOCIATION to meet in Memphis Tenn at its regular annual meeting in 1902 The Cotton Exchange Business Men's Club, Passenger Association and all commercial interests in the city are anxious to have Memphis selected as the next meeting place Memphis, while her hotel capacity is not as large as it might be, compares favorably with any other city of her size The hotel capacity is approximately 1500, without crowding, and there are definite promises to care for 1560 comfortably, 2200 by crowding, and 3225 by auxiliary resources, namely respectable boarding houses The auxiliary resources will cover only rooms in easy reach of the hotels and cafes Aside from the hotels Memphis offers her homes Meeting places for the different Sections, and banquet halls, etc, have been fully planned for

W BRITT BURNS

Saratoga Springs in 1902

In selecting a place for the next meeting of the ASSOCIATION, an effort should be made to find a place than can accommodate all possible delegates friends and business people interested, and that too without crowding or making it necessary to engage accommodations two or three months in advance Among the places that will extend an invitation to the ASSOCIATION for its next annual meeting will be Saratoga Springs, N Y In extending this invitation Saratoga Springs can and will guarantee practically unlimited thoroughly first class accommodations at prices which will suit every purse Its summer hotels are the largest in the world, and any or all of them will be open to the accommodation of the ASSOCIATION Two of its largest hotels will accommodate about three thousand guests two others about two thousand, and four or five smaller ones from three hundred to five hundred each, and all of these in closing the convention hall, within a distance of each other of four city blocks, and this estimate is based on the actual num

bei which are accommodated in ordinary times at the season s height In addition to these, it boasts of a number of smaller hotels and many private boarding houses Saratoga can accommodate easily twenty thousand guests The citizens have lately built a convention hall especially designed for the use of conventions This hall will seat comfortably five thousand persons Abundant facilities for the meeting of the different branches can be furnished In addition to its superior and unusual accommodations as a convention town, Saratoga Springs is the health resort of the continent It lies to the eastern spur of the Adirondacks and its climate is remarkably healthful Saratoga is a village of unusually beautiful drives, its streets are well paved and delightfully shaded, so abundant is the shade that the village seems planted in the forest Then we have Saratoga Lake one of the most beautiful bodies of water to be found in the Adirondacks This lake is easily accessible by trolley and by one of the most beautiful drives to be found anywhere in the world Saratoga Springs and vicinity teem with historic interest Only a few miles away the battles of Saratoga were fought while a short distance to the north lie the beautiful and historic lakes George and Champlain The village abounds in beautiful parks and elegant private grounds which are open to the public for drives D C MORIARTA

511 Broadway Saratoga Springs

Association News

General Executive Committee

The first meeting of the General Executive Committee of the AMERICAN MEDICAL ASSOCIATION will be held in Parlors 2 and 3, Hotel Ryan, St Paul Minn, on Monday, June 3 1901 at 5 p m A full attendance is requested, in order that the committee may get to work early and be ready for business referred to it by the ASSOCIATION Subsequent daily meetings will be held in the same place, and about the same hour daily unless otherwise ordered by the committee L DUNCAN BULKLEY, M D, secretary

Kentucky State Medical Society

At the annual meeting of this Society, held in Louisville May 22, 23 and 24, Dr J N McCormack outlined the salient features of the report of the Committee on Reorganization of the American Medical Association, after which a resolution was introduced and adopted unanimously, urging the delegates of the Kentucky State Medical Society to go to St Paul and do all in their power towards the adoption of the report after its presentation

Illinois State Medical Society

A motion was made and carried at the recent meeting of this Society, endorsing the report of the Committee on Reorganization of the American Medical Association, and the retiring president Dr George N Kreider, was instructed to convey such information to the American Medical Association at St Paul A committee of five was also appointed to consider the revision of the Constitution and By Laws of the Illinois State Medical Society in conformity with what will be adopted at the American Medical Association meeting, and to report at the next annual meeting

Resolution of Nebraska State Medical Society

Resolved, That this Society hereby endorses the plan of the Committee of the American Medical Association of a thorough reorganization of the American Medical Association and all affiliating societies, and all delegates of the Nebraska State Medical Society in attendance of the annual meeting of the American Medical Association at St Paul are hereby instructed to use all diligent efforts for the accomplishment of this object, and all permanent members are respectfully solicited to do likewise

The Excursion to Yellowstone Park

The General Manager of the Northern Pacific asks us to announce that those who have made reservations must deposit $13 per berth, or $26 per section, at the St Paul ticket office on or before 6 o clock p m Wednesday, June 5 It is necessary for those who are making the arrangements to know approximately how many will go two days before the time of starting so that ample equipment can be furnished and the necessary preparations made Hence all who propose to go on this trip should secure their reservations as soon after their arrival in St Paul as is practicable

Report of the Committee on Transportation

The Committee on Transportation reports that since its announcement last week it has been able to secure in the New England Passenger Association an extension of time limit to July 15 for the St Paul meeting provided the return tickets are deposited with the joint agent not earlier than May 29, nor later than June 15 together with the payment of 50 cents extension fee The Southeastern Passenger Association has granted the same time limit extension under the same conditions, but has failed to this date to announce a rate The rate will probably be one and a third, but your Committee is endeavoring to secure the one fare plus $2 rate out of that territory Your committee is particularly pleased that it has been able, at last to secure a uniform time limit extension to July 15, under the usual regulations, in all of the railroad associations on the occasion of the various St Paul meetings The Western and Central Associations have granted us a one fare plus $2 rate for the round trip, and the Trunk Lines and New England roads have granted a one fare and one third certificate plan The Southeastern Passenger Association rate has not been decided upon finally, but your committee will secure the lowest possible rate, which of course, will not be obtained in time for publication in THE JOURNAL prior to the St Paul meeting Delegates residing in this territory will learn the rate from their local ticket agents, and are advised to apply early for their rates and certificates The same advice in the matter of certificates is hereby given to delegates residing in the Trunk Lines and the New England Territories Delegates from any of the territories who desire to avail themselves of the stop off privilege at Milwaukee on returning, are hereby informed that the only road of the Western Passenger Association territory granting this privilege at the request of your committee, and in the best interest of the physicians at large, is the Chicago Milwaukee and St Paul Railroad Company This road in conjunction with the Pennsylvania and its connecting lines out of the East, in consequence of the better facilities offered, and their hearty co operation with your Committee in the interest of the medical delegates, has been decided upon as the official route to and from the meeting at St Paul Your Committee, though human, has declined all personal courtesies offered by several competing roads and have had, in advising you but one object in view, our duty and your interests —H L E JOHNSON, Chairman

Deaths and Obituaries

Thomas F Rumbold, M D, Jefferson Medical College, Philadelphia, 1862 one of the pioneers in rhinology in the United States, noted for his work in this department, and for his contributions to its literature a member of the AMERICAN MEDICAL ASSOCIATION, died at his home in St Louis, May 23 aged 71 The St Louis Medical Society held a special meeting May 24 to take action on the death of Dr Rumbold

Whitcomb Eliphalet Pratt, M D, College of Physicians and Surgeons, Baltimore, Md, 1885, a widely known and popular physician of Buckingham Court House Va, and a member of the Virginia State Medical Society and the AMERICAN MEDICAL ASSOCIATION, died from valvular heart disease after a long illness at Richmond, Va, May 16, aged 51

Alexander Stewart, M D, College of Medicine of Queen's University and Royal College of Physicians and Surgeons Kingston, Ont, 1889, state examiner for the Modern Woodmen of America and well known for his professional ability throughout the state, died suddenly at his home in St Thomas, N Dak May 19, from heart disease

Frederick L Nutt, M D, Chicago Medical College, 1878, a prominent and successful physician of McHenry County and a member of the AMERICAN MEDICAL ASSOCIATION, at his home in Marengo, Ill, May 23, from pneumonia after an illness of two weeks, aged 49

Paul R Moore, M D, New York University, 1859, who retired from practice a number of years ago, and has since resided in Los Angeles, Cal died at the residence of his son, Dr Thomas B Moore, Butte, Mont May 13, from pneumonia, aged 65 years

Cyrus D Morrill, M D, New York University, 1859, one of the oldest practitioners of Madison Me, formerly superintendent of schools and representative in the state legislature, died at his home in Madison, May 15, aged 70

Thomas Alexander Means, M D, Atlanta Medical College, 1856, a well known physician of Alabama, and a surgeon in the Confederate service throughout the civil war, died at his home in Montgomery, May 14, aged 69

George W Pembroke, M D, University of Maryland, Baltimore, 1868, died at Friendship Anne Arundel County, Maryland, May 12, from the effects of a carbuncle on the neck

Dalton Trumbauer, M D, Jefferson Medical College, Philadelphia 1892, died from consumption, May 15, after a long illness, at his home in Coopersburg Pa aged 32

Jacob Derickson, M D, University of Pennsylvania, Philadelphia, a retired physician of Wilmington, Del, died at his home in that city, May 16, aged about 70

Robert O Brien Durrett, M D, University of Louisville, Ky, 1851, died at his home, Newstead, Jefferson County, Ky, May 12, from paralysis aged 73

Conrad Wienges, M D, College of Physicians and Surgeons, N Y, died from multiple neuritis at his home in Jersey City, May 23, aged about 53

George W Scott, M D, Medical College of Virginia, Richmond, 1894 died from pneumonia at his home near Madison Run, Va May 14 aged 28

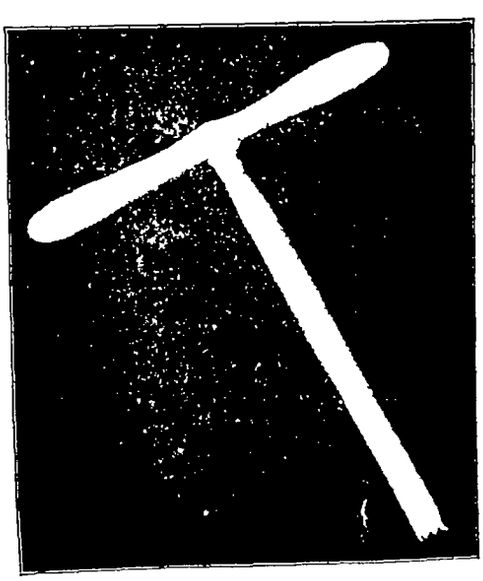
John Adams Wells, M D, College of Physicians and Surgeons, New York, 1879, died at his home in Englewood, N J, May 21, from pneumonia

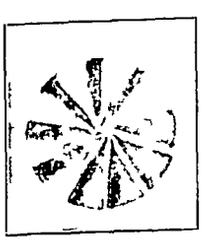
New Instruments.

New Mastoid Drill

B A WASHBURN, M D

WICKLIFFE, KY

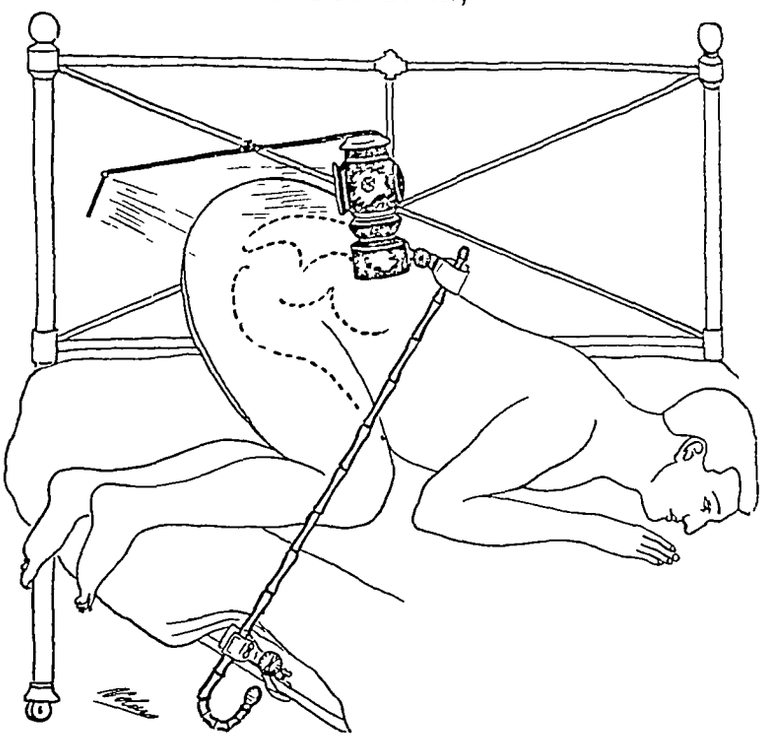




End view of cutting surface

I present herewith two illustrations of my mastoid drill or gouge This instrument I have used almost exclusively in place of the regular gouges for mastoid work, and as it has proven very practical it may be of interest to other members of the profession

A New Device,



Consisting of the combination of a bicycle lantern, mirror and bar, and a walking stick, for illumination of the rectum at the bed side Thos Chas Martin M D, Cleveland

Miscellany

Value of Vaccination—Inspector Spalding, of Chicago, states that between Nov 30, 1900, and May 8, 214 cases of smallpox were reported, of which 182 were of persons who never had been vaccinated, 21 had imperfect, doubtful marks very old, 7 had fair but old marks, and 4 only had typical old marks

Primary Echinococcus of the Pleura Cured with Sublimate—J Bokay describes in *Orvosi Hetilap*, 1900, 17, a case of primary echinococcus of the pleura in a boy of 5 Evidences of the parasite were discovered in the fluid obtained by an exploratory puncture and Bacelli's method of treatment was followed After withdrawal of the fluid through a puncture between the fourth and fifth ribs, 20 c c of a filtered 1 per 1000 solution of sublimate was injected The temperature rose to 39 2 C for five days, but the symptoms gradually improved A second injection like the first, a month later, was followed by the rapid disappearance of all symptoms and the patient was dismissed cured with a gain of three kilograms in weight

Bier's Improved Method of Spinal Cocainization—The improved technique which Bier has heralded and which he presented at the German Congress of Surgery, April 11, is a combination of subarachnoid injection of cocain and an elastic ligature around the neck to restrict the action of the cocain to the spine and keep it out of the brain According to the report in the *Semaine Med* of April 17, he injects a much weaker solution of the cocain than is generally used at present, and aspirates a corresponding amount of cerebrospinal fluid to make room for it An elastic band is fastened around the neck sufficiently tight to induce slight cyanosis without much discomfort By this combination he has been able to reduce to a remarkable extent the unpleasant consequences of medullary analgesia as the increased intracranial pressure interposes an obstacle to the diffusion in the cocain Further researches in this line, he added, will result in the evolution of a perfected technique of spinal cocainization free from all danger Constriction of the neck to induce hyperemia of the brain has been utilized recently by Bier as a therapeutic measure, as described in THE JOURNAL of January 12 p 144

Societies

COMING MEETINGS

American Medical Association St Paul Minn June 4 7
Association of Military Surgeons of the United States St Paul May 30 31, June 1, 1901
American Academy of Medicine St Paul Minn June 1 3
National Con State Medical Examiners and Licensing Boards St. Paul Minn June 3
Association of American Medical Colleges St Paul June 3
American Medical Editors Association St Paul June 3
Minnesota State Medical Society, St Paul June 3
Indian Territory Medical Association Vinita June 4 5
American Proctological Association St Paul Minn June 4 5
American Dermatological Association Chicago June 4 6
Rhode Island Medical Society Providence, June 6
South Dakota State Medical Society Huron June 10 11
International Association of Railway Surgeons Milwaukee June 10 12
Medical Society of Delaware Lewes June 11
Oregon State Medical Society Portland June 11 12
American Medico Psychological Association Milwaukee Wis June 11 14
Maine Medical Association Portland June 12 14
Massachusetts Medical Society Boston June 12
Colorado State Medical Society Denver June 18
American Orthopedic Association Niagara Falls June 11 13
Medical Society of New Jersey Allenhurst June 25 27
Wisconsin State Medical Society Waukesha June 26
Medical Association of Nevada Reno July 1
American Ophthalmological Society New London Conn July 17

Indian Territory Medical Association—This association will hold its annual meeting at Vinita June 4 and 5

Schuylkill County (Pa) Medical Society—At the meeting of this society May 7 delegates were appointed to the AMERICAN MEDICAL ASSOCIATION

La Salle County (Ill) Medical Society—At the annual meeting of this society in Ottawa April 30 Dr William H Fraser, La Salle, was elected president

American Association of Life Insurance Examining Surgeons—The next session of this Association will be on June 3, in St Paul Minn in the Masonic Hall

Buffalo Academy of Medicine, Medical Section—At the recent meeting of the section Dr Julius Ullman was elected chairman and Dr Albert E Wochnert secretary

South Dakota Medical Society—The twentieth annual meeting of this society will be held in Huron June 10 and 11 under the presidency of Dr C M Keeling Springfield

Medical Society of the State of Washington—This society will hold its annual meeting in Seattle June 18 19 and 20, under the presidency of Dr Park Weed Willis of that city

State Medical Society of Wisconsin—The fifty fifth annual meeting of this society will be held in Waukesha, June 26, 27 and 28, under the presidency of Dr John F Pritchard Manitowoc

Medical Society of New Jersey—The annual meeting of this society, which was organized in 1766 will be held at Allenhurst, June 25, 26 and 27, under the directorship of Dr John D McGill, Jersey City

Bristol County (Mass) Medical Society—At the annual meeting of this society, at Fall River, Dr Milton H Leonard New Bedford, was elected president, and Dr John W Coughlin, Fall River, vice president

Union District Medical Society—The annual meeting of this society was held in Rushville Ind, April 25 Dr Mark Millikin, Hamilton, Ohio was elected president, and Dr Everett R Beard, Liberty, secretary

Muscatine (Iowa) Medical Society—At the annual meeting of the society, held May 2, Dr Henry M Dean was elected president Dr Calvin W Smith vice president, and Dr John L Klein secretary and treasurer

Washington City (Iowa) Medical Society—This society was organized April 26, with the following officers Dr Edmund R Jenkins president, Dr J C Boice vice president, and Dr George W Hay, secretary and treasurer

Albert Lea District Medical Society—The second annual session of the society was held at Albert Lea, Minn, May 21 Drs Albert C Wedge and Hamilton H Wilcox were re elected president and secretary respectively

Spartanburg County (S C) Medical Society—This society was reorganized May 15 and elected Dr Hugh R Black president Dr Lewis J Blake vice president, Dr G De Foix Wilson secretary, and Dr George R Dean treasurer

Alumni Association of Cincinnati College of Medicine and Surgery—At the annual meeting of this association, May 1 Dr William Roush Spencerville, Ohio was elected president and Dr Edward S Johnston, Cincinnati, secretary and treasurer

Charleston (W Va) Medical Association—This association which was recently organized, has elected Dr Alfred S Patrick president, Dr William W Tompkins, vice president, Dr Timothy L Barber secretary and Dr John L Stump, treasurer

Albert Lea District (Minn) Medical Society—This Society at its annual meeting elected the following delegates to the Association Drs Berthold M J Conlin Owatonna, Peter H Vesterborg Forest City Iowa, and Hamilton H Wilcox Albert Lea

Fort Dodge (Iowa) Medical Society—At the meeting of this society, May 9 Dr Alanson M Pond, Webster City, was elected president, Dr Thomas F Grayson, vice president, Dr Harley G Ristine, treasurer and Dr W R Bates, secretary, all of Fort Dodge

Savannah (Ga) Academy of Medicine—This society has effected permanent organization, with the following officers Dr Arthur A Morrison, president, Dr Frederick Wahl, vice president Dr J Oliver Cook, secretary, and Dr George L Harman, treasurer

La Porte (Ind) Medical Society—At the annual meeting of this society at La Porte, April 30, delegates to the AMERICAN MEDICAL ASSOCIATION were appointed, Dr Horace Wardner was reelected president and Dr Eber L Annis reelected secretary both of La Porte

Franklin County (Vt) Medical Society—At the annual meeting of the society held at St Alban's Hospital, May 9, Dr F Merriman Brown Sheldon, was elected president, Dr William R Prime, Burlington, vice president and Dr James N Jenne, St Albans secretary

Dorchester County (S C) Medical Association—The physicians of Dorchester County met at St Georges, May 15, to organize a county medical association, and elected Dr P L Horn temporary chairman and Dr John B Johnston temporary secretary both of St Georges

Aesculapian Medical Society of the Wabash Valley—The annual meeting of this society was held at Mattoon May 16 Dr John A Baughman Neoga was elected president, Dr Francis D Lydick Paris vice president, and Dr Harry McKennan Paris secretary and treasurer

Center County (Pa) Medical Society—This society held its regular monthly meeting on May 14, at Bellefonte, and elected the following delegates to represent it at the meeting of the AMERICAN MEDICAL ASSOCIATION in St Paul Drs S M Huff, J Y Dale, and H S Braucht

Clay County (Mo) Medical Society—At the annual meeting of this society held at Liberty, April 29, Dr Leander J Jones was elected president, Dr John J Rice, Kearney vice president, Dr F H Matthews, Liberty, secretary, and Dr John H Rothwell, Liberty, treasurer

Franklin District (Mass) Medical Society—At the annual meeting of this society, held in Greenfield, May 14, Dr Halbert G Stetson, Greenfield, was elected president, Dr Francis J Canedy, Shelburne Falls, vice president, and Dr Benjamin P Croft Greenfield, secretary and treasurer

Middlesex East District (Mass) Medical Society—At the meeting of this society held May 9, in Woburn, Dr Charles E Chase Woburn, was elected president, Dr Joseph W Heath, Wakefield vice president, Dr Ernest S Jack, Melrose, secretary, and Dr Charles Dutton, Wakefield, treasurer

Fifth District Branch of the New York State Medical Association—The newly elected officers of the association are Dr Emil Mayer, New York, president, Dr Mary Gage Day, Kingston, vice president, Dr Edmund L Cocks, New York, secretary, and Dr Edward H Squibb, Brooklyn, treasurer

Colorado State Medical Society—The coming meeting of this Society at Denver, June 18, 19 and 20, promises to be of unusual interest A special feature of the first day's program is a report on the history of medicine in Colorado, and on the second a symposium on diseases of the kidney will be held

Connecticut River Valley Medical Association —The annual meeting of this Association was held at Bellows Falls, Vt, May 7 Dr James A Craig, Westmoreland, N H, was elected president, Dr J Sutcliffe Hill, Bellows Falls, Vt, vice president and Dr Edward R Campbell, Bellows Falls, Vt, treasurer

Clinical Society of the District of Columbia —This society gave its annual banquet May 28 An elaborate program was prepared by the committee, of which Dr Wilfred M Barton is chairman, and Drs Wells, James, Ramsburgh and De Vries the other members The society then adjourned for the summer

Union County (Ky) Medical Society —The annual meeting of this Society was held in Morganfield, May 6 The following officers were elected Dr Vaudois E Handley, Sturgis, president, Drs R L Martin, Bordley, and I D Winston, Sturgis, vice presidents, and Dr Wiley L Dixon, Morganfield, secretary and treasurer

Essex North District (Mass) Medical Society —The annual meeting of this Society was held in Lawrence, May 1 Dr Frank B Flanders, Lawrence, was elected president, Dr John F Croston, Haverhill, vice president, Dr Maurice D Clarke, Haverhill, secretary and treasurer, and Dr Alphonso B Brown, Newburyport, corresponding secretary

Washington County (Pa) Medical Society —The annual meeting of this Society was held in Washington, May 14, when the following officers were elected Dr William R Thompson, Washington president, Dr George A Linn, Monongahela, vice president, Dr John A McKean, Washington, secretary, and Dr Albert E Thompson, Washington, treasurer

New Hampshire Medical Society —The one hundred and tenth annual meeting of this Society was held in Concord May 16 and 17 The following officers were elected Dr Daniel S Adams Manchester president, Dr Irving A Watson Concord vice president, Dr Marcellus H Felt, Hillsboro Bridge, treasurer, and Dr Granville P Conn, Concord, secretary

Ex Internes' Association of Good Samaritan Hospital, Cincinnati —At the third annual reunion and banquet of this Society the following officers were elected Dr Frank Brunning, president Drs Jephtha D Davis, Frank L Ratterman and Dudley Webb, vice presidents, Dr Robin W C Francis, secretary and Dr John P Miller, treasurer, all of Cincinnati

Hampshire District (Mass) Medical Society —This Society convened for its annual session at the Northampton Insane Hospital, May 10, elected delegates to the AMERICAN MEDICAL ASSOCIATION and the following officers Dr John A Houston, president, Dr Clarence R Gardner vice president, and Dr Arthur G Minshall, secretary, all of Northamptom

Buffalo Anti Tuberculosis Society —The name of the Erie County Society for the Prevention of Tuberculosis has been changed to the Buffalo Anti Tuberculosis Society An exhibit will be shown at the Pan American Exposition, and among other things a stained preparation of a tubercle bacillus found in the expectoration on the floor of a street car will be shown

Worcester District (Mass) Medical Society —The annual meeting of this Society was held at Worcester May 8 Dr Edward R Wheeler, Spencer was elected president, Dr Samuel B Woodward, Worcester, vice president, Dr Lester C Miller, Worcester, secretary, Dr George O Ward, Worcester, treasurer, and Dr Charles A Peabody, Worcester, orator

Alumni Association of Dartmouth Medical College (Hanover, N H) —The following officers were elected at the annual meeting of this Association held in Concord, May 16 Dr Granville P Conn, Concord, president, Drs Milton S Woodman, West Lebanon, and Alonzo S Wallace, Nashua, vice presidents, and Dr Howard N Kingsford, Hanover, secretary and treasurer

Chattanooga Medical College Alumni Association —At the annual meeting of this Association, May 23, the following officers were elected Dr D W C Genter Middlesboro, Ky, president, Drs Thomas H Appleton, Collinsville, Ala, J B Hughes, Spring Place Ga, and J J Stringer, Oak Vale, Miss, vice presidents, and Dr German Haymore, Chattanooga, Tenn, secretary

Middle Tennessee Medical Association —The fourteenth semi annual meeting of this organization was held in Shelbyville, May 16 and 17 Fayetteville was selected as the next place of meeting Dr Reginald Stonestreet, Nashville, was elected president, Dr George W Moody, Shelbyville, vice president, and Dr James K P Blackburn, Columbia, secretary and treasurer

Brazos Valley (Texas) Medical Association —This Association held its semi annual meeting at Calvert, May 15, and elected Dr Daniel Parker, Calvert, president, Drs Felix R Collard, Wheelock, and Selwyn P Rice, Marlin, vice presidents, Dr John W Hudson, Milano, secretary, and Dr Wellington B Briggs Easterly, treasurer The November session will be held at Bryan

Worcester North District (Mass) Medical Society —The annual meeting and banquet of this Society was held at Fitchburg, April 22 Dr Herbert H Lyons, Fitchburg, was elected president, Dr Charles E Bigelow, Leominster, vice president, Dr Walter F Sawyer, Fitchburg, secretary, Dr Eustace L Fiske Fitchburg, treasurer, and Dr Atherton P Mason, Fitchburg, librarian

Long Island College Hospital Alumni Association —The twenty first annual reunion and banquet of this body was held May 13, the graduating class being the guests of the Association Dr William F Campbell was elected president, Dr Burr B Mosher vice president, Dr Thomas A McGoldrick, secretary, Dr John O F Hill, treasurer, and Dr William S Hubbard, historian, all of Brooklyn

Erie County (Ohio) Medical Society —The annual meeting of this Society was held in Sandusky, May 2 The following officers were elected Dr Charles Graefe, Sandusky, president, Drs Maro J Love, Bloomingville, and Elwood Stanley, Sandusky, vice presidents, and Dr Henry C Schoepfle, Sandusky, secretary, and treasurer Delegates to the AMERICAN MEDICAL ASSOCIATION were also elected

Camden County (N J) Medical Society —The annual meeting of this Society was held May 14, and the following officers were elected Dr William R Powell, president, Dr John G Doron, vice president, Dr Paul M Mecray, secretary, Dr Ernest S Ramsdell, treasurer, and Dr Harry H Sherk, historian, all of Camden A large number of delegates to the AMERICAN MEDICAL ASSOCIATION were elected

Baltimore County (Md) Medical Association —The annual meeting of this Association was held at Towson, May 16 The following officers were elected Dr James F H Gorsuch, Fork, president, Dr R Percy Smith, Sunny Brook, vice president, Dr William P E Wyse, Pikesville, recording secretary, Dr Richard C Massenburg, Towson, corresponding secretary, and Dr Harry S Jarrett, Towson, treasurer

Michigan State Medical Society —The following officers were elected at the annual meeting of this Society Dr Leartus Connor Detroit president, Drs Beverly D Harison, Sault Ste Marie, Charles Douglas Detroit, and Lincoln P Parkhurst Middleville vice presidents, Dr Andrew P Biddle, Detroit, secretary, and Dr Charles E Hooker, Grand Rapids, treasurer It was voted to hold the 1902 meeting in Port Huron

Jefferson Medical College Alumni Association —The annual meeting and banquet of this Association was held, May 14 in Philadelphia The following officers were elected Dr William H Hartzell, Allentown, president, Dr Henry Tucker, Philadelphia corresponding secretary, Dr Frank C Hammond, Philadelphia, treasurer, Drs Hobart A Hare, Orville Horwitz Joseph S Neff, and George B McClellan, vice presidents

Southern Illinois Medical Association —At the annual meeting of this Association held in Metropolis, May 17, the following officers were elected Dr Obed A Dean, Campbell Hill president, Drs James A Helm, Metropolis, and M D Empson, Hartford vice presidents, Dr Orange B Ormsby, Murphysboro, secretary, Dr Charles E Riseling, Murphysboro, assistant secretary, and Dr Alexis T Telford, Menard, treasurer

Mercer County (N J) Medical Society —At the annual meeting of this Society, held in Trenton, May 14, Dr George H Parker was elected president, Dr Alexander Armstrong, vice president, Dr George R Moore secretary, Dr Dunbar Hutchinson, recording secretary, and Dr Irenaeus M Shepherd, treasurer, all of Trenton Delegates to the State Medical Society and the AMERICAN MEDICAL ASSOCIATION were also selected

Iowa Medical Women's Social Society —The fourth annual session of this important adjunct to the Iowa State Medical Society was held in Davenport, May 14 The following officers were elected Dr Margaret E Colby, Clear Lake, president, Drs Lenna L Meanes, Des Moines, and Kate A Hogle Mason, MountVernon, vice presidents, Dr Jennie McCowen, Davenport, secretary, and Dr Agnes Eichelberger, Sioux City, treasurer

Arkansas State Medical Society—The twenty sixth annual meeting of this Society was held at Hot Springs May 14 15 and 16 The following officers were elected Dr Frank Vinsonhaler Little Rock president, Drs C R Chenault, Helena and William N Yates, Fayetteville, vice presidents Dr Joseph P Runyan Little Rock, secretary and Dr Richard C Thompson, Pine Bluff treasurer Little Rock was selected as the meeting place for 1902

Medical Association of Montana—The twenty second annual meeting of this Association was held in Great Falls May 15 and 16 The following officers were elected Dr Thomas J Murray Butte, president Drs T J McKenzie, Anaconda, and Louis Bernheim, Butte vice presidents, Dr Benjamin C Brooke Helena, secretary Dr James F Spelman, Anaconda, corresponding secretary and historian and Dr George H Barbour Helena treasurer The next meeting is to be held in Butte

Morganfield District (Ky) Medical Society—At the fifth annual meeting of the society held at Henderson, May 13, it was decided to change the name of the organization to the "Ohio Valley Medical Association" The following officers were elected Dr Cyrus B Graham, Henderson, president Drs Thomas A Frazer Christian County, James W Stone, Henderson, and Labe J Sigler Clay vice presidents, Dr Wiley L Dixon Morganfield secretary, Dr J A Humphrey, Henderson, librarian, and Dr S S Amerson Sullivan, treasurer

William Pierson Medical Library Association—Formal organization of this Association was effected at Orange, N J May 14 It was announced that in addition to her gift of the extensive and valuable medical library of Dr Pierson, his widow had given the association $5000 as an endowment fund Arrangements have been completed for housing the library in a special alcove at the Stickler Memorial Free Library, where the books will be available for the study of any regular physician and for a room in the library building for the exclusive use of the members of the association where they may read or study the books in the medical library alcove and where meetings may be held The following officers were elected Dr Thomas W Harvey Orange president, Drs William J Chandler, South Orange and Dr Richard C Newton, Montclair, vice presidents, Dr Richard D Freeman, South Orange, secretary Dr J Hammond Bradshaw Orange, treasurer, and Dr M Herbert Simmons Orange, librarian

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PHILADELPHIA PATHOLOGICAL SOCIETY

Meeting held April 25, 1901

President Dr Frederick A Packard in the chair

Trichinella Spiralis Trichinosis and Trichina Inspection A Zoological Study

DR CHARLES WARDELL STILES Washington spoke upon this topic According to the speaker the subject of trichina might be viewed from several aspects, such as the hygienic and economic On this occasion he felt that the choice of the subject was an appropriate one since the discovery of this disease had been made by a Philadelphia physician and scientist—Dr Joseph Leidy in the year 1847 It was interesting to note the incidents connected with this finding The history was that while this scientist was eating a ham sandwich, he observed that in the meat small peculiar bodies could be seen scattered throughout its substance Brushing a few particles aside, he subsequently placed them under a microscope, and found the trichina As a result of this discovery the most bitter political fight has been made against an American food stuff than from any discovery ever made It has cost more paper, ink, and money than any hygienic discovery In one sense it has given more impetus to bacteriology than any other discovery In 1848 a German investigator found the trichina spiralis in an other animal than the hog In 1870 when American pork began to compete with other markets of the world the discovery which Leidy had made was used as an argument for the exclusion of American pork It is difficult to estimate the financial loss to this country resulting from this controversy, but it doubtless runs up into hundreds of thousands of dollars Later American pork was admitted to the market through the custom houses in Germany and what has been the result? By this admission the most thorough system of preventive measures against diseased foods that has probably ever been instituted

The speaker then outlined the life history of the trichina spiralis dividing it into three stages The worm is swallowed by man and on gaining admission into the alimentary tract, the females burrow into the muscular walls and become encysted Subsequently the male and female embryo burrow outward toward the muscles and undergo the same process Hogs contract the disease by eating infected human offal Rats by eating infected pork, human cadavers, and by eating one another Unlike diphtheria and smallpox, trichinosis does not give rise to epidemics

As to the prevention of the disease the German method is to prohibit as an article of food pork which has not been thoroughly cooked That degree of temperature which will coagulate albumin, will kill trichina The government of Germany has also instituted a very expensive system of inspection of pork, by a corps of meat inspectors supported by the state at an expense of $3,700,000 per year To do such work in America a corps of 65 000 microscopists would be necessary Observations have demonstrated that 2 per cent of the hogs of America are infected with trichina The largest outbreak of the disease restricted to one community occurred in Massachusetts where 48 cases had been reported

The speaker was opposed to the system of trichina inspection by Government microscopists This system would tend to lead to a false feeling of safety, and persons might then eat infected pork, thus increasing the number of cases of the disease Thus of 3388 cases of trichinosis found in Germany 132 deaths had resulted from errors of inspection During the exclusion period of American pork 4083 cases of trichinosis had occurred in Germany During the years from 1892 to 1898 not one case of trichinosis could be traced to American pork

In discussing this paper Dr F A Packard stated that several years ago he had endeavored to infect guinea pigs with meat containing trichina without successful results

DR. J A SCOTT spoke of the occurrence of eosinophilia in trichinosis

DR RANDLE C ROSENBERGER spoke of a recent case of trichinosis occurring at the St Joseph's Hospital in which the eosinophiles numbered 4 per cent

DRS A A ESHNER and J D STELLE spoke

In closing Dr Stiles detailed the method of "pickling" American pork by injecting down the sheath of the long bones a preservative fluid such as saltpeter, salt, and sugar The old method consisted in simply allowing the pork to be immersed in this fluid, which was not so apt to destroy trichina nor to prevent decomposition of the meat, as by the newer method, Pork packers have been warned to never use borax as a preservative The government exercises no control over the sale of pork to be carried from one of its cities to the other, nor of the chemicals to be used As to pork for exportation it must always be thoroughly pickled

After the meeting Dr Stiles was tendered a reception at the University Club

Meeting held May 9

President Dr Frederick A Packard in the chair

Case of Ball clot in the Auricle Death by Occlusion

DR W S WADSWORTH reported and exhibited specimens from such a case The previous history was not known except that the man had for some time been on a prolonged debauch and had been an employe of a factory where he was doing very hard work His death came on suddenly At the autopsy a round and large clot was found loose in the auricle, and surrounded by a currant jelly clot The clot was round or oval in shape and probably two inches in length and one and a half inches in thickness It was enveloped in a more or less tenacious coat which stripped off readily The center of the clot was a deeper red color No organization of the clot had probably taken place The length of time which it had been in the heart of course could not be estimated accurately, but it had probably been present in the auricle for a month or more

DR JOSEPH MCFARLAND had seen emboli in nearly all the cavities of the heart In one case an embolus was the size of a grape He had recently seen two cases of ball thrombi in the left auricle

Hemorrhagic Pachymeningitis and Spinal Tumor

DR F S PEARCE presented "Two Specimens of Hemorrhagic Pachymeningitis, and Tumor in the Spinal Cord" One specimen of pachymeningitis had occurred in the service of Dr James Tyson, and the other in his own ward Both of the patients had been males, both were unilateral, and both were probably of chronic duration One patient was 38 years, the other 71 years of age In his patient it was suspected that cerebral hemorrhage had taken place In the case of Dr Tyson the patient had suffered from hemiplegia, later dying of nephritis In this latter case a spastic condition was present In the case of Dr Tyson the hemorrhage involved the right side of the body, while in his patient the hemorrhage was on the opposite side

The tumor of the spinal cord seemed to spring from the dura mater in the thoracic region of the cord and producing pressure to such an extent that the cord was completely flattened In this case the sensation of the lower extremities were only slightly obtunded, but the functions of the cord did not seem to be otherwise impaired

DR JOSEPH MCFARLAND then detailed the microscopical appearance of the tumor He had found a great deposit of lime salts which was deposited in a peculiar fashion while the general histologic appearance was unusual The tumor might have been an endothelial growth of cholesteotoma

Diphtheria Bacilli in Noma

DR J WALSH, after studying several cases of noma, had in several found pure cultures of diphtheria bacilli He had made diagnosis of diphtheria bacilli only after subjecting the micro organisms to certain tests, such as injecting it into guinea pigs, and rabbits and afterwards by culture methods Smear cultures had also been made, and afterwards the staining properties had been studied In most of the cases there had been a mixture of the streptococci, staphylococci and other micro organisms together with the diphtheria bacilli The speaker then detailed a series of seven cases giving the result of his findings in these cases Four of these cases had begun as stomatitis Of 15 cases of ulcerative stomatitis, in only one was diphtheria bacilli found In one instance at a certain hospital there were 15 cases of stomatitis, but in these no diphtheria bacilli were found In some of the cases of noma there had been a previous history of diphtheria a short while before the development of noma The speaker stated that in this disease different writers had found different kinds of micro organisms Noma is often present after an attack of measles

New Apparatus

DR W W BARCOCK exhibited apparatuses for rapidly measuring culture media, for washing pathological specimens, and for mounting specimens imbedded in celloidin The first apparatus consisted of a tube serving the purpose of a burette, which was graduated and under the control of two pinch cocks, which on being pressed would alternately open and close two separate rubber tubes, thus allowing the fluid to run out of one tube while at the same time the other tube would become full of fluid from atmospheric pressure The second apparatus was for washing morbid specimens It consisted of a copper pan, inside of which was another smaller compartment, and so arranged that when a wire sieve was placed over it, and water allowed to enter the pan it would circulate up into the bottles containing the specimens which were inverted over this sieve In this way a constant stream of water could be made to permeate the specimens quite rapidly

Rupture of Aorta

DR W E HUGHES and DR JOSEPH MCFARLAND presented specimens of a "rupture of aorta" The patient had been a man of 40 years, but the history was indefinite At the autopsy the pericardial sac was filled with blood The pericardium itself was normal The weight of the heart was 650 grams, and contained currant jelly clots All the great vessels were filled with blood A few patches of atheromatous plates had been found In the ascending arch of the aorta there had been a laceration of the inner coats thus permitting the blood to dissect its way upwards The lungs were edematous, and the pleura contained serous fluid

NEW YORK ACADEMY OF MEDICINE

Stated Meeting of Section of Medicine, April 16, 1901

DR E FRANKLIN SMITH in the Chair

Case Illustrating the Influence of Arterial Spasm on Left Heart

DR JUDSON DALAND, Philadelphia, reported this case as an introduction to a discussion on the relation of arterial change to the heart The case was that of a healthy girl of 10 years who, after having eaten a large quantity of a certain table sauce, the chief ingredient of which was apparently capsicum, had been made so ill that she had been admitted to hospital She suffered from headache, fever anorexia, difficulty in swallowing and convulsions, and the urine contained a few blood cells and albumin one fourth by bulk The pulse was over 100 and somewhat irregular, and the radial arteries felt like wires From the physical signs in the chest it was inferred that the condition of the heart was rather one of acute dilatation than of hypertrophy Most of the symptoms had disappeared in a few days, and in two weeks the condition of the urine and of the blood vessels was once more normal

DR WILLIAM H THOMPSON said that in all probability acute dilatation of the heart was quite common in scarlatina and in acute rheumatism as a result of arterial spasm The small, high tension pulse was so characteristic of scarlet fever that when a physician was called to see a child who had been suddenly taken ill with vomiting and high fever, there was good reason to suspect scarlet fever, even though the eruption had not yet appeared Dr Thomson said that he had made a number of observations on the specific gravity of the urine in chronic nephritis, and these had revealed the fact that there were remarkable fluctuations in the specific gravity not only from day to day, but from hour to hour During these observations the total quantity of urine for the twenty four hours had been determined, and no change had been made in diet or medication His explanation was that vasomotor storms occurred in the splanchnic area, and this he considered significant as pointing out the fact that the heart is probably often subjected to intermittent strain, and that this may explain the tendency to cardiac hypertrophy This strain occurs prior to the atheroma, for it was well known that there may be extensive atheroma without cardiac hypertrophy He believed that arterio capillary disease is always the result of toxemia, and that the great therapeutic measure in such cases was fresh air, because this tends to counteract the chemical changes in the blood

DR BEVERLEY ROBINSON said that as it was well known that under certain circumstances cardiac hypertrophy is a beneficent provision of nature, it behooved the physician to think carefully before prescribing nitroglycerin or other vasodilator merely with the object of overcoming an increased arterial tension

DR RICHARD VAN SANTVOORD remarked that his experience had taught him that the loudness of the second heart sound is no indication of high arterial tension or of the strength of the heart, and this he explained on the theory that the energy with which the valve closes is dependent upon the difference in the blood pressure on the two sides of the valve

The Climate of Long Island

DR LEGRAND DENSLOW read a paper on this subject, based on careful observations made by the government metereological observers In this study and analysis the author brought out the novel and important practical information that there is a region in the eastern end of Long Island where the atmosphere is remarkably dry and where each year there are over 100 more days of sunshine than in New York City In these respects this region compares favorably with other and better known places in the far West Such a place should prove desirable for residence for persons suffering from diseases of the heart, lungs and kidneys, or from rheumatism

Stated Meeting of Section on Genito Urinary Diseases, April 17

DR William K Otis in the Chair

Gonorrheal Myositis

DR MARTIN W WARE reported this case, commenting upon

the great rarity of the condition in medical literature and presenting sections under the microscope and photomicrographs He had been able to find only three cases of gonorrheal myositis on record

Modification of Cook's Method of External Urethrotomy Without a Guide

Dr Percy R Polton described the method as follows The position of the apex of the prostate is determined through the rectal wall and with the finger on this part the knife is carried up toward the apex until the urethra is entered The external wound is then enlarged and the division of the stricture completed His modification consists in making a curvilinear incision across the perineum exposing the tendinous center of the perineum The attachment of the sphincter ani is divided and reflected and the triangular ligament incised transversely The anterior fibers of the levator ani are pushed backward and the prostate exposed With the apex of the prostate as a guide an incision is made into the urethra in the middle line and prolonged forward

Gonorrheal Auto Reinfection of the Urethra

Dr Ferd C Valentine presented a paper on this subject He maintained that in every case the focus of disease could be detected by persistent search The best aid to diagnosis was a microscopical examination of the sedimented urine The best treatment was by dilatation and irrigation Sometimes the diagnosed glands would require direct applications For purposes of diagnosis one was warranted in producing sufficient irritation to set up a discharge

Dr Louis Heitzmann said that after many years of patient work he was in a position to assert most positively that microscopic examination of the urine was of very great value in determining the locality of the disease If a number of examinations of the same case were made at different times and inflammation of the genito urinary tract was present the epithelia sought for would be found

Dr John P Van der Poel thought many cases of auto reinfection were the result of involvement of the prostate In such cases, massage of the prostate followed by irrigation was the proper treatment Good results often followed extreme dilatation by means of special dilators of certain portions of the anterior urethra

Dr Douglas H Stewart remarked that he had never met with a case exhibiting slight moisture of the urethra in which the urine did not respond to Heller's test for albumin

Dr Frederick R Sturgis did not believe that the gonococci often invade the prostate He had had poor success with irrigations, and preferred local applications of a 10 per cent solution of protargol through the endoscope For the anterior urethra he often made use of zinc injections with a hand syringe

Dr W W Otis said that the wonder was not that one occasionally met with cases of auto reinfection, but that gonorrhea ever was thoroughly eradicated The surface of the urethra was dotted over with hundreds of openings—the glands of Littre—openings large enough to admit a bristle It must be evident that the germicides can not get down to the bottom of these glands or into the ducts of the prostate Why some recover from gonorrhea without the use of a germicide, or, indeed without any treatment while others are persistently reinfected though subjected to the most approved treatment was still an open question but apparently the element of personal immunity was an important factor

Stated Meeting of Section on Obstetrics and Gynecology, April 25

Dr A Brothers in the chair

Dilatation of the Cervix

Dr H J Garrigues read a paper on this subject Among the medical methods of favoring cervical dilatation during labor were injecting into the cervix 1/40 of a grain of atropin dissolved in sterile water painting the cervix with a 10 per cent. solution of cocain the administration of 15 grains of chloral every twenty minutes for three or four doses the administration of 10 grains of antipyrin every half hour for three doses A slow but useful mechanical method of dilating the cervix was by inserting a strip of iodoform gauze into the cervical canal and packing the vagina with creolin gauze until the following day when the dressing was to be renewed and the packing carried still higher up into the cervical canal Where a rapid dilatation was demanded the manual method would be found excellent It consisted in introducing first one finger, then two three and four fingers, and finally the whole hand in the shape of a cone The various forms of rubber bag dilators were then described and the statement made that lateral pressure was to be preferred to the pushing upward of a large conical mass In urgent cases, some practitioners made use of Duhrssen's deep cervical incisions but while they may occasionally save a child's life that might otherwise be lost they exposed the mother to immediate danger and remote suffering

Axis Traction Forceps

Dr Lobert H Grandin said that few teachers of obstetrics and few practitioners seem to understand the advantages under certain conditions which this form of forceps has over all others It was surprising that in this country axis traction had never gained a foothold In 1879 it had been his privilege to attend for a number of months the wards of the maternity in Paris under Professor Tarnier and he could vividly recall with what enthusiasm Tarnier had demonstrated to him the advantages of the axis traction forceps Subsequently in his services at the New York Maternity Hospital and at the New York Infant's Asylum he had had ample opportunity to test this instrument and it was now his custom to carry an axis traction forceps to obstetric cases Over and over again he had succeeded in effecting delivery where other men, more skillful than he had failed with other types of forceps Leverage was a necessary accompaniment of traction because it was infinitely difficult to pull in a straight line Forcible rotation endangers the maternal parts and moreover the fetus may not follow the movement of the forceps For the low operation any variety of obstetric forceps should answer The high forceps operation was limited in his hands to cases in which the membranes had ruptured and the presenting part had engaged For the high operation traction must be made in the correct axis with the least expenditure of energy upon the part of the operator and with the least interference with the normal mechanism such as rotation, also with the least compression of the fetal head and with the least danger to the mother's parts These requirements were certainly best met with the axis traction forceps With this instrument one substituted, for blind traction, sentient traction The seesaw motion which almost inevitably enters into the application of the ordinary forceps does not enter into the application of the axis traction forceps The following cardinal rule must be observed or the axis traction forceps would almost certainly slip "While making traction the traction rod must ever remain parallel to and almost in contact with the handles" Neglect of this rule made the axis traction forceps a very dangerous instrument

Version Indication, Limitation and Technique

Dr S Marx at the outset confessed that he was strongly of the opinion that there is a large field for perforative instruments believing that the life of the mother should be given preference over that of the child He elects version over forceps for all cases in which the head remains above the brim In all positions, good or bad in which the head remains above the brim version should be elected early In transverse or atypical positions prophylactic version done as soon as the membranes have ruptured serves the best purpose In cases of placenta previa or where prolapse of the funis threatens the child's life, version is indicated In general, version was indicated in all cases in which the life of the mother was threatened as for example in uremic convulsions or embolism of the lung presupposing of course, full dilatation of the cervix If the cervix were not fully dilated it must be rapidly secured by manual dilatation or by deep incisions before the version The following rules should be borne in mind Always be sure of the position and of the presentation 2 Be sure that the

fetus is alive, or that its life is in no great danger, as determined if necessary by the introduction of the hand into the uterus and palpating the umbilical cord 3 Do version if possible before rupture of the membranes or as soon as possible afterward 4 As clinical experience has shown that after manual dilatation of the cervix the latter is prone to contract again speedily after the delivery of the head, immediate extraction in such a case should be practised after version Dr Marx said that he felt that an error was too commonly committed of using the feet as a means of traction during the extraction of the head, and that it was better to use them as a guide and trust largely to the *vis a tergo* for the delivery of the after coming head No operative method except perforation should be done in the presence of a dead or dying fetus When the head was passing the contracted inlet a gain of three fourths of an inch in the conjugate could be obtained by putting the woman for the time being in a position of exaggerated extension

Symphyseotomy

Dr Edward A Ayers discussed this subject, based on a personal experience with the operation in 11 individuals and done 13 times There had been no death attributable to the operation, no infection of the joint no serious hemorrhage, and no general disability No sutures had been used Injury to the sacroiliac joint need not occur, and union at the symphysis was greatly aided by slinging the pelvis in a U shaped hammock It was very important to secure full cervical dilatation before operating The great majority of cases of pelvic contraction beyond the range of the forceps could be delivered by symphyseotomy

Cesarean Section

Dr E B Cragin discussed this operation He said that he had done it nine times in the last three years, and had saved both mother and child in every instance except one In that one the operation had been undertaken solely with the object of easily delivering a woman who at best was so far advanced in carcinoma of the uterus that she had but a short time to live If the woman were in such poor condition as not to be able to stand an operation like Cesarean section, craniotomy should be done If both mother and child were in good condition, and delivery by forceps or version were impossible, Cesarean section should be selected in hospital practice In conditions of moderate pelvic contraction one must decide between Cesarean section and symphyseotomy The abdominal incision could be made shorter by incising the uterus before bringing it up into the abdominal wound To avoid adhesions forming between the uterus and the abdominal wall a portion of the omentum should be placed between them

Dr Charles Jewett said that version was an operation too much neglected, yet he sometimes used the forceps when the head was above the brim provided he could readily crowd it into the brim and hold it there while applying the axis traction forceps The open wound for symphyseotomy seemed to him preferable to Dr Ayers' subcutaneous method The field for this operation was a small one The results for both mother and child were not so good from symphyseotomy as from Cesarean section, but symphyseotomy presented some advantages where the woman had been long in labor

CHICAGO MEDICAL SOCIETY

Regular Meeting held April 24

President Dr James H Stowell in the chair

Four Cases of Surgery of the Ureters

Dr Edward Evans, of La Crosse, Wis, read a paper, by invitation, on this subject Reference was made to the bibliography of ureteral surgery its experimental exploitation, the demonstration of its practicability in the human subject, its technique, the possibility of relieving suffering thereby, preserving useful organs and prolonging life Credit was given to the work of Van Hook Martin Frank, Peterson Connell Fenger, and others

Case 1—Intermittent hydronephrosis of fourteen years' duration, abnormal vessels adherent to ureter and causing kinking of same, ureterolysorthosis, recovery

Case 2—Valvular obstruction of left ureter due to oblique insertion, extra pelvic operation, division of spur, transverse union, recovery

Case 3—Intermittent hydronephrosis, hugely distended pelvis and sacculated kidney, lateral implantation of ureter and kinking of same, extra pelvic operation through lumbar incision after opening abdomen in mistaken diagnosis

Case 4—Cystitis, ureteritis, disappearance of right kidney by inflammatory changes, pyelonephritis of left kidney, suprapubic cystotomy nephrolithotomy, rectal implantation of left ureter, death twenty months later from uremia

Dr William T Belfield emphasized the use and value of the X ray in the diagnosis of kidney and urogenital lesions prior to operative measures

Dr Carl Beck stated that the results of implantation of the ureters into the bowel were uniformly the same, experiments on animals having shown that after some months, sooner or later, degenerative or infective processes in the kidneys took place He referred to a case which had remained in very good condition a year and a half after he had implanted the ureters into the sigmoid flexure

Dr Jacob Frank pointed out that one very peculiar feature following implantation of the ureters was that the cystitis always terminated at the neck of the bladder, the inflammation never extending to the urethra

Dr L E Schmidt spoke on the diagnosis of ureteral obstruction, and mentioned a method introduced by Dr Kolischer and himself which had proved valuable in several cases

A Symposium on Ulcer of the Stomach

Dr N S Davis, Jr, dwelt on the "Symptoms and Diagnosis of Gastric Ulcer" Attention was called to the frequency with which the malady occurs Many pathologists have found evidences of former gastric ulcer or existing ulcer in from 3 to 10 per cent of those who were examined at autopsy By the majority of practitioners only those cases are recognized in which hematemesis occurs, that is in about one third of all cases A majority instead of a minority, of all cases should be recognized It is true that in certain ones a diagnosis is impossible The characteristic symptoms of those in which hematemesis does not occur, but in which a diagnosis can be made, were fully described The diminished acidity of the urine and the occurrence of an alkaline wave after meals, and the diminished amount of chlorids in the urine were described as evidences of hyperacidity of the stomach and as occurring in strange contrast to the conditions existing in cancer and chronic gastritis with which round ulcer is so often confused Digestive leucocytosis exists in cases of gastric ulcer, but as a rule is slight or wanting in cases of cancer and chronic inflammation Persistent and even anemic leucocytosis occurs in most cases, of course, but does not occur in round ulcer The ratio of hemoglobin to red corpuscles often resembles that of pernicious anemia in cancer but that of chlorosis in round ulcer In both maladies hemorrhages often reduce both equally at least for the time being The differential diagnosis of the disease was fully described

Dr William A Evans discussed the "Pathology of Ulcer of the Stomach," describing sizes, outlines and situation As to location, the seats of ulceration are the lesser curvature, the posterior surface, and near the pylorus Other regions are less often affected Occasionally the duodenum and the esophagus are the seat

Under pathology the speaker discussed some questions of greater interest because of their obscurity, and some of these were the relation of sex the relation of hyperacidity, chlorosis, thrombus and embolus, syphilis, method of healing, comparison with hemorrhagic erosions question of scars, and the relation of ulcer to carcinoma

The analysis of 7700 autopsies by Stawell would indicate that ulcer of the stomach is about as frequent in men as in women Gluzinski says the majority of the ulcers occur in men The usually accepted figures are, about twenty times as often in women as in men Greenough and Joslin, as a result of a study of the cases in the Massachusetts General Hospital from 1888 to 1898, conclude that it is four times as frequent

in men as in women Saundby says it is twenty times as frequent in women as in men

Hyperacidity and ulcer of the stomach are generally associated The speaker's opinion is that the hyperacidity results from the continued irritation of the ulcer and not the ulcer from the hyperacidity Neumeister and Lenzel have shown that the hyperacid gastric juice does not digest as readily as that which is normal In any case of marked hyperacidity in a young woman ulcer as an etiological factor is to be borne in mind In ulcer of the duodenum no hyperacidity of the gastric juice can be demonstrated as a general proposition

Among the other etiological factors recognized are embolus and thrombus The anatomical arrangement of the celiac axis and of the gastric artery would make embolus infrequent Besides, embolus is not common in people presenting the clinical picture manifested by a case of ulcer of the stomach Thrombus can frequently be demonstrated

That there is a relation to chlorosis is beyond question Again there is the difficulty of deciding which is the primary lesion On the one hand the loss of blood, and, perhaps, more important still, the direct absorption through the ulcer of incomplete digestion products can produce chlorosis Usually the degree of anemia bears some relation to the loss of blood On the other hand women with ulcer of the stomach usually give a history of anemia preceding the ulcer The same is not true of men The ulcer does not repair until the anemia is lessened according to Fütterer This might be true, and the chlorosis be only a contributing factor Hemmeter and Stokes have collected 21 cases of syphilitic ulcer in the literature up to 1900

Under the head of results of ulcer of the stomach, the essayist considered methods of healing scars carcinoma springing immediately from the ulcer and developing carcinoma from the scar It is stated by Welch that 5 per cent of all autopsies reveal scars at the site of healed stomach ulcers But not every case of ulcer produces permanent scars—scars persisting for years Scars in actively working organs tend to disappear in course of time Ziegler in a late study says that ultimately muscle scar tissue is replaced by functioning muscle in many cases

As to the relation of ulcer to carcinoma Fütterer holds that carcinoma develops right in the ulcer as a result of physical injury It develops on the side of impact Billings quotes Lebert, Rosenheim Zenker, Hemmeter and Kollmann as believing that carcinoma usually develops in healed gastric ulcer areas Lebert states that 9 per cent of carcinomas grow from such scars Rosenheim says 6 per cent, Zenker says most of the cases originate in such areas

DR JAMES B HERRICK read a paper on "Treatment of Ulcer of the Stomach" He called attention to the fact that many of these ulcers healed spontaneously, as is proven by the clinical history of cases and by postmortem examinations, with accidental findings of typical scars The conditions that tend to keep up the process are the general chlorotic state, the local circulatory condition but above all, the irritation from food which excites peristalsis and vomiting and causes an outflow of the hyperacid gastric juices Theoretically the best results should be obtained from the treatment securing most nearly perfect rest of the stomach, including freedom from peristalsis, from movements of the viscus, and attending movements of the body Experience shows it to be true that the more nearly these ideal conditions are met the better the result Drug treatment is unsatisfactory Treatment by light or milk diet gives better results The results of Leube and others who employ his method are by far the best Leube puts his patients to bed, applies hot applications over the epigastrium, and gives a minimum amount of a carefully selected food, with occasional drugs to correct hyperacidity Of 556 cases Leube had examined, there was recovery in 74 per cent improved in 22 per cent unimproved 1 6 per cent deaths 2 per cent

The treatment by rectal feeding and rest in bed is really but a modification of the treatment of Leube but it carries the rest of the stomach one degree nearer the ideal of complete rest

Dr Herrick then stated the objections to the method, that it was unnecessary, that it was impracticable that the rectum would become intolerant, that nourishment was not absorbed, that the patient could not stand it and would become dangerously weakened, that the treatment was inefficient, and answered each objection in detail, showing that where the treatment was carefully carried out the objections did not hold The objection, also urged, that it is difficult to make an accurate diagnosis of ulcer of the stomach, and that the patient might be subjected to this method of treatment when no ulcer was there, was admitted to be perfectly true, yet he regards it as much better to treat for ulcer what is not that disease than to let ulcer go untreated, and no case of gastric disease treated in this manner could be seriously harmed, even though it were not ulcer

The technique of the treatment was described in detail, importance being laid on securing consent of the patient by a clear explanation of the reasons for the treatment and the advantage of having the patient under the care of a skilled nurse Absolute rest in bed of from two to six weeks was advocated Nothing should be allowed by the mouth, not even water, for from three days to three weeks Nourishing enemas should be given at regular intervals, a cleansing enema of water given every morning, gradual substitution of liquid by the mouth for the enemata could be allowed when the pain, tenderness and vomiting had entirely ceased It was better in all cases, if possible, to keep the patient on rectal feeding for at least one week Light diet should be continued many weeks after the patient had left the bed Attention should be given to the anemia, preferably by the administration of iron The results of the treatment were almost immediate disappearance of the nausea, vomiting and pain and a rapid lessening of the tenderness on pressure Hunger thirst and sleeplessness were scarcely complained of after the first 24 hours Emaciation and weakness rapidly disappeared when the feeding by the mouth was begun In recent cases of ulcer a cure can be quite confidently predicted In older cases, of months' or years standing, there is generally an improvement, occasionally a cure Certain cases are clearly surgical, chiefly those with alarming severe hemorrhage, or repeated small hemorrhages, not disappearing under rest and rectal alimentation, also cases of perforation, with peritonitis, cases complicated with adhesions, perigastritis, dilatation, etc, and cases with obstinate vomiting, or severe pain that resists the treatment by alimentation Believing that other methods of treatment are unsatisfactory, and that this method by rest and rectal feeding offers the most favorable conditions for the natural healing of the ulcer, that it is safe, practicable and efficacious, he believes it should be tried in all cases and not reserved for the complicated or desperate ones

DR E WYLLYS ANDREWS read a paper on "The Complications and Surgical Treatment of Gastric Ulcers" Complications requiring surgical treatment are 1, perforation, 2, hemorrhage, 3, stenosis of the pylorus and vague incurable troubles from ulcers not cured by medical treatment The writer believes that gastric ulcer is a surgical disease, just as much as an ulcer on the tongue would be Only the dangers and difficulties of operating cause any such cases to be left in medical hands As surgery justifies itself by its results, it transfers whole classes of cases to the surgical domain Those which in the present status of the art may be claimed by surgeons are All cases of perforation seen early, all cases of bleeding ulcer which have repeated hemorrhages, and most of those which have more than one very large hemorrhage, all cases of intractable gastric ulcer which, with or without stenosis of the pylorus, seem likely to be benefited by gastroenterostomy or pyloroplasty

The technique of laparotomy for perforation was given. Operations for bleeding ulcer are much less common but have shown brilliant results Two new cases were reported by Dr Andrews A new method of removing the ulcer by ligature *en masse* was described with animal experiments to confirm the conclusions Cases by Mansell Moullin and other English surgeons were quoted in which the writer's technique had been adopted

Operations for incurable stomach ulcer causing stenosis and other forms of disturbance were also alluded to It was declared by the writer that most of the improvements in gastric surgery were being made by the French and German specialists, whereas American surgeons had taken the lead in intestinal surgery Gastro enterostomy is employed by Mikulicz, Doyen, Kuster, Konig and others with brilliant results in gastric ulcer *Pyloroplasty has been done through the floor* of a bleeding ulcer The writer has had best success with pyloroplasty by the Heineke Mikulicz method and believes it the safest operation, although a majority of writers favor gastroenterostomy

DR ARTHUR DEAN BEVAN spoke of the difficulty of making a diagnosis between gastric ulcer and carcinoma He has seen several cases in the last few years where, on account of the youth of the individual the history of the case, the excess of hydrochloric acid, the symptom complex generally, a diagnosis was made of gastric ulcer, and yet operation disclosed carcinoma He could not agree with Dr Andrews that gastric ulcer was a surgical disease, any more than cholelithiasis was always a surgical affection The treatment outlined by Dr Herrick he considers of great value and rational Rectal feeding and putting the stomach at rest constitute as rational a treatment for many cases of gastric ulcer as does gastro enterostomy

DR JACOB FRANK mentioned retroperistalsis following rectal enemata in a case of gastric ulcer which came under his observation in 1883

DR HERRICK, in closing said he had never seen retro peristalsis following rectal enemata although a physician with whom he saw a case in consultation told him that he was positive the patient had vomited material which had been introduced per rectum

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THE AMERICAN SURGICAL ASSOCIATION

Meeting held in Baltimore, May 7 8 and 9, 1901

(Concluded from p 1491)

Treatment of Arterio venous Aneurysm of the Subclavian Vessels

DR R MATAS, of New Orleans, read this paper and reported a case of perforation of the right subclavian artery and vein, through the scalinus anticus by a bullet, the patient being a young man aged 24 The bullet also injured the brachial plexus and caused paralysis of the corresponding upper extremity Ten days subsequent to the injury the operation was performed An osteoplastic resection of the clavicle with disarticulation at the sterno clavicular joint was made under local infiltration anesthesia with eucain B and a temporary traction loop of silk was applied under the first portion of the anomalous subclavian artery, the innominate being absent The vein was provisionally compressed above and below the anastomotic orifice Profuse hemorrhage occurred when the vein was detached from the artery in spite of the fact that complete control of the subclavian at its orifice had been obtained, the bleeding being stopped by the application of double ligatures above and below the perforation of the artery Indirectly the bleeding had its source in the vertebral and internal mammary The artery between the ligatures was divided, the orifice in the vein closed by a lateral suture and venous circulation re established An undeformed bullet, 38 caliber, was extracted and shock followed, the patient being restored by saline infusion Primary healing of the operative wound and recovery, with partial loss of the hand and forearm from mortification caused from arterial ischemia and insufficient collateral circulation followed

Phlebitis following Abdominal Operations

DR ALBERT VANDER VEER, Albany, N Y, read a paper on this subject Abdominal work gives more anxiety during an epidemic of grippe Acute perforative appendicitis is more prevalent in August and September, because of the diet in which young people indulge, also in December and January because of exercise and exposure In operations deep in the pelvis, ligating the uterine and ovarian vessels and applying a mass of ligature, it is fortunate we do not have more serious complications than is generally met with Where these do arise suspicion may occur at once as to some failure in technique but we should consider the great range of pathological lesions met with in the pelvis It is very unpleasant, but very necessary, in these cases to keep the patient two or three times as long as promised at first The essayist discussed four cases of phlebitis from his own experience

The literature on this subject is very scarce and there is great question as to whether phlebitis in these cases is of septic origin In his own cases he was not altogether sure but that the tight bandage may have had something to do with at least two of them Never has there been delay in the union of the wound Pain was one of the pronounced symptoms When the lesion presented there was also a rising and accelerated temperature and pulse Sex makes no apparent difference, neither does the nature of operation In all four cases the patient was in a horizontal position, so there was no extra pressure upon the vessels of the extremities The pelvis was not elevated Loss of blood slight Patients all strong previous to the operation, with the exception of case one Ligatures used were silk, no catgut in the peritoneal cavity

An Operation for the Radical Cure of Umbilical Hernia

DR WILLIAM J MAYO, of Rochester, Minn, stated that patients suffering from umbilical hernia are usually obese, with attenuated muscles It is sometimes wise to reduce the weight before operating The neck of the protrusion should be exposed early and its omental contents ligated off at this point, saving time The writer has made the following method nineteen times The steps of the operation are as follows A transverse elliptical incision is made at the base of the hernial protrusion to and through the peritoneum Traction upon the hernia exposes its contents at the point of entrance Return of intestine if present, and ligation of extruded omentum Exposure of the aponeurosis above and below the margin of the incision The lower flap of aponeurosis and peritoneum is slid upward three quarters of an inch into a pocket previously formed, between the upper margins of aponeurosis and the peritoneum, retention by two rows of buried sutures The sliding can be made from side to side in the same manner, and was so performed in ten of the nineteen reported cases If the ring is very large the overlapping from above downward is easier of performance

Prevention and Cure of Post operative Hernia

DR JAMES E MOORE of Minneapolis in this paper said that ventral hernia is rare among good operators except after operations for acute appendicitis The causes of ventral hernia are sepsis, improper closure of the wound and drainage The location of the wound is of less importance than its proper closure Each tissue should be united to its own kind by through and through stitches of silk worm gut and buried sutures if absorbable material Buried sutures of unabsorbable material are objectionable and unnecessary The crossed suture of Dr Fowler is a very good one, but requires more time to apply it and causes more pain when removed than the through and through suture Always avoid drainage when possible Most cases of pelvic surgery requiring drainage are best drained through the vagina

AFTERNOON SESSION

DR S H WEEKS read a paper on "Fractures and Dislocations of the Spine"

Giant Sacrococcygeal Tumors

DR CHARLES A POWERS, of Denver, presented, with photographs, a paper on this subject A male child was first seen at 3 months of age, at which time there was found an enormous growth occupying the sacrococcygeal region extending laterally to the buttocks and forward in front of the anus It was irregularly ball shaped and in size as large as the head of a child of 6 years Below and in front the growth was cystic above and laterally it was firm and in places nodular The skin over the tumor was of a bluish red over the cystic parts, normal above and at the sides Deep palpation showed

no gap in the bony structures There was nothing abnormal about the rectum The tumor was moved by the gluteal muscles but the tension of the mass was not changed when the child cried There was no paralysis nor anesthesia of the lower extremities No operation was advised and the growth underwent spontaneous contraction The skin did not ulcerate the contents of the cystic portion were absorbed and when the child was 3 years and 9 months old the tumor had shrunk to the size of a man's fist and was well flattened out over the sacrococcygeal region The boy is as strong and healthy as other lads of his age lies on his back and sits like other children except for its mere presence the tumor gives no symptoms While this growth lacks pathological confirmation it is assumed that it is a teratoma or embryoid tumor having a double germinal substratum

Radical Cure of Inguinal and Femoral Hernia

DR W B COLEY of New York made a report of 800 cases operated upon from 1891 to 1901 The writer believes that the decade that has just passed may be said to have definitely settled the question as to the possibility of permanently curing inguinal and femoral hernia by operative treatment Whereas ten years ago the mortality of the operation for non strangulated hernia was not far from 6 per cent today in competent hands it is not more than one half or one quarter per cent In addition to the comparatively large mortality ten years ago the fact that 50 per cent of the cases relapsed within two to three years after operation was sufficient to prevent the majority of patients from undergoing operations for radical cure The writer believes that the method introduced by Bassini in 1890 the highest point in the evolution of the ideal operation for hernia

Use of Silver Wire and Electricity in the Treatment of Aneurysms

DR LEONARD FIEFMAN of Denver read this paper it was discussed by Dr J M T Finney, of Baltimore Dr De Forest Willard, of Philadelphia and Dr R Matas, of New Orleans

DR M L HARRIS of Chicago read a paper on "Movable Kidney its Cause and Treatment which appears in this issue of THE JOURNAL

DR S J MIXTER of Boston read the following papers 1 'Two Cases of Abdominal Contusion Fracture of Spleen—Splenectomy—Recovery Fracture of Kidney—Nephrectomy—Recovery" 2 'Nephrolithotomy on Both Kidneys' 3 "New Method of Closing the Defect Following the Thorough Removal of the Breast '

Resection of the Chest Wall for a Large Sarcoma Successful Use of the Antistreptococcic Serum

DR W W KEEN of Philadelphia read this paper The author referred very fully to the details of the operation together with the condition of the patient before and after In concluding his remarks he called particular attention to 1 The method of separating the tumor from the chest wall so as to determine more exactly the limits of the disease and lessen the size of the opening to be made in the chest 2 The division of the ribs anteriorly and posteriorly prior to opening the pleural cavity this diminished very much the period of danger in the collapse of the lung 3 The use of Fels apparatus which was not satisfactory in this case and for which he prefers to substitute the apparatus of Dr Bloom of New Orleans which he then showed to the Association or the apparatus of Matas, which was then demonstrated by its inventor 4 The suture of the lung to the chest wall which was followed by no untoward surgical result It diminished very greatly the amount of post operative pneumothorax and in fact one might almost say abolished it 5 The use of the antistreptococcic serum and as to whether it was the cause of the fall in temperature or only a coincident the results seeming to be so striking 5 The examination of the blood which was of great value as showing the reason for the continued high temperature and led to what the author believes to have been the proper treatment for the condition

In the opinion of the Doctor it is too early to determine what will be the future of the patient but up to the present time a period of nearly seven months, the results have been entirely satisfactory

Pneumotomy of the Lung

DRS HEARN AND ROE reported and exhibited a case of a large abscess of the lung of 22 years' duration probably the result of local gangrene following pneumonia, in a male patient aged 26 Pneumotomy was performed and the abscess drained for two years with much improvement in general health marked lessening of the previous horribly offensive odor but without any healing or reduction in the size of the cavity They again operated and excised a portion of the abscess wall stitching the margins of the remainder to the skin surface thus converting it into an open cavity, with relief from the annoyance of wearing a drainage tube and of cleansing the cavity and with practically entire cessation of odor Although about six months have elapsed the cavity remains unchanged and there is evidence of secondary bronchiectasis for which they assign two probable causes i e cough and cirrhosis of lung tissue To obliterate the original cavity and to relieve the bronchiectasis or cure it, they propose to remove the greater portion of the lower ribs with their periosteum in this way allowing the chest wall to collapse upon the lung

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Therapeutics

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice Proper inquiries concerning general formulae and outlines of treatment will be answered in these columns]

Insomnia in Melancholia

℞	Hyoscinæ hydrobromatis	gr 1/4	015
	Camphoræ monobromatis	ʒi	4

M Ft Cap No xii Sig One capsule every two or three hours until effective

Treatment of Typhoid Fever

As stated in an article in Louisville *Jour of Med and Surgery*, the time to push medicine in treatment of typhoid fever is in the beginning Produce free elimination by administering either magnesium sulphate or mercurous chlorid The article further states that the use of intestinal antiseptics should be begun early The following are recommended

℞	Sodii sulphocarbolatis	ʒiiss	10
	Ext hydrastis fluidi	ʒii	8
	Aquæ destil, q s ad	℥ii	64

M Sig One teaspoonful in water one half hour before taking nourishment giving the nourishment at 3, 6, 9 and 12 o clock As a substitute for the sodium sulphocarbolate guaiacol carbonate may be given in 10 grain doses

After taking nourishment the following should be given

℞	Pepsini (scale)	ʒiss	6
	Acidi hydrochlorici dil	ʒi	4
	Aquæ destil q s ad	℥ii	64

M Sig One teaspoonful after each feeding

If constipation is present the substitution of cascara sagrada for the hydrastis in the first prescription is recommended and the use of normal saline enemas to aid in making the bowels move

Glycerin as an Antiseptic

Glycerin is used a great deal as a basis for various medicines Wunschheim in *Indian Med Record* states that he has investigated its antiseptic properties He tested the effect of glycerin on various forms of germs alone and in combination with various antiseptic preparations It has no special value as an antiseptic, and if used in combination with carbolic acid and other preparations, the antiseptics must be stronger than if used with water A concentration of 10 per cent carbolic acid is about as effectual as a 5 per cent solution in water but if glycerin be mixed with equal parts of water the disinfectant value is as good as in pure aqueous solution

Leucorrhea

According to *Merck's Archives* the following is of service in treatment of leucorrhea

WHEN AN ACID DISCHARGE IS PRESENT

℞	Sodii boratis	℥iv	128
	Sodii bicarb	℥viii	256
	Pot chloratis	℥iv	128

M Sig Two level tablespoonfuls in two quarts of warm water twice daily as a douche

WHEN ULCERATION OF CERVIX IS PRESENT

℞	Ichthyol	ʒiv	16
	Iodoformogeni	ʒi	4
	Lani	ʒv	20
	Vaselini	℥iii	12

M Sig Apply twice daily with a swab

Ulcers of the Leg

O Schulze as noted in *N Y Med Jour*, gives the following as dressing in ulcers of the legs

℞	Camphoræ (triturated)	gr vi	36
	Zinci oxidi	ʒi	4
	Adipis q s ad	ʒv	20

M Sig Use as a dressing to the ulcer or

℞	Camphoræ (triturated)	gr xii	72
	dissolve in		
	Olei olivæ	ʒv	20
	and add		
	Zinci oxidi	ʒv	20

M Sig Apply as a dressing upon gauze and renew twice a day

Non indications for the Use of Carbolic Acid

The *Internat Jour of Surgery* states that it is better to discard carbolic acid entirely in treatment of wounds in children Not only do they develop gangrene very readily from its continuous effect in wet dressing but fatal cases of poisoning have been known to occur from the application of so weak a solution as 1 in 40

Impetigo

Impetigo is a disease which is very frequently found among the poorer classes, and several members of the family may be affected in routine order Jay F Schamberg, in *Internat Med Mag*, advises that the crusts first be removed followed by mild antiseptic applications He advises the following lotion applied through the day

℞	Hydrarg bichloridi	gr i	06
	Glycerini	ʒi	4
	Spts vini rect	℥i	32
	Aquæ q s ad	℥iv	128

M Sig Apply locally several times through the day

The following ointment should be applied at night

℞	Hydrarg ammon	gr xxx	66 1
	Pulv amyli		
	Pulv zinci oxidi, āā	ʒii	8
	Petrolati	℥ss	16

M Sig Apply locally at night

He states that some lesions upon the face will yield more quickly to the following ointment

℞	Resorcini	gr xv	1
	Lanolini		
	Petrolati, āā	℥ss	16

M Sig Locally applied

Or as a lotion the following may be used upon the face

℞	Resorcini	gr xl	2 66
	Acidi borici	gr xl	2 66
	Glycerini	ʒi	4
	Alcoholis	℥ss	16
	Aquæ q s ad	℥iv	128

M Sig Apply locally to the case as a lotion

He further states that to patches upon covered surfaces, a 10 to 20 gram solution of silver nitrate may be applied

For Mosquito Bites

M Manquet recommends the following application to be applied to the face, upon tender surfaces and in cases of very young children

℞	Formalin (40 per cent sol formaldehyd)	ʒv	20
	Alcoholis		
	Aquæ, āā	ʒx	40

M Sig Apply locally lightly without reaching the smarting point and thus avoid caustic action

Ingrowing Toe Nail

℞	Sol plumbi subacetatis	ʒiv	16
	Tinct opii	ʒv	20
	Aquæ q s ad	℥viii	256

M Sig Apply on lint to reduce the inflammation and ease the pain

Treatment of Cancer

The *Med Standard* gives the following formulæ in treatment of cancerous growths where surgery is non indicated

℞	Acidi arsenosi	gr xv	1
	Alcoholis (absolute)	℥iiss	75
	Aq destil	℥iiss	75

M Sig Cleanse and dry the ulcer and apply with a brush If no pain is caused in five minutes, another layer should be applied —*Trunecek*

Another formula is given as follows

℞	Acidi arsenosi		
	Orthoformi, āā	gr xv	1
	Alcoholis	℥iiss	75
	Aquæ	℥iiss	75

M Sig Apply locally

Bougard s paste is also mentioned as recommended by Danial Lewis, as follows

℞	Wheat flour		
	Amyli āā	℥ii	64
	Acidi Arsenosi	gr xv	1
	Cinnabari		
	Ammon chloridi āā	gr lxxv	5
	Hydrarg chloridi mitis	℥iss	48
	Sol zinci chloridi (52 degrees F)	℥viii	240

M Sig Spread a thick layer upon cotton and leave in position for twenty four hours

Treatment of Scabies

Hopf, as noted in Internat Med Mag, states that miraculous results are obtained by the use of the following ointment, first having the patient thoroughly scrubbed for several minutes with green soap and hot water He then puts the patient into a hot bath for several minutes with continued scrubbing By this method the pustules and burrows are open The ointment is then well applied

℞	Sulphuris loti	ʒv	20
	Potassii carbonatis	ʒiiss	10
	Adipis	℥iv	128

M Sig Apply thoroughly and allow the ointment to remain on for twenty four hours

Treatment of Pertussis

The *Brooklyn Med Jour* gives the following formula in treatment of pertussis during the paroxysmal stage

℞	Extracti belladonnæ	gr i	06
	Aluminis	ʒss	2
	Glycerini		
	Syr zingiberis		
	Syr tolutani		
	Syr acaciæ āā	℥ii	64

M Sig One teaspoonful four times a day for a child 2 years of age

Treatment of Keratitis (Inflammation of Cornea)

℞	Acidi borici	gr ii	12
	Atropinæ sulphatis	gr 2/3	04
	Aq destil	ʒii	8

M Sig Put one drop into the eye morning and night until the inflammation subsides

Treatment of Pulmonary Emphysema

Dr Cailla in *Post Graduate* recommends the following in treatment of emphysema following pertussis in children

℞	Potassii iodidi	ʒii	8
	Spts ammon arom	ʒi	4
	Tinct opii camph	ʒi	4
	Syrupi simplicis	ʒiv	16
	Aquæ destil q s ad	℥iii	96

M Sig One teaspoonful in water every three hours

Medicolegal

No Damages for Death of Man or Beast from Fright—The Supreme Court of Iowa says, in the case of Lee vs the City of Burlington, that, as a general settled rule with reference to human beings, no recovery may be had for injuries resulting from fright caused by negligence of another, where no immediate personal injury is received, and it sees no reason why the same rule should not be applied to animals Damages, to be recoverable must be such as, in the ordinary course of things naturally follow from the act complained of while death from fright alone is so unusual and extraordinary that one ought not to be held liable therefor

Damages for Partial Paralysis and Mental Suffering,—The Court of Civil Appeals of Texas affirms, in the case of the Missouri Kansas & Texas Railway Company of Texas vs Miller, a judgment for $10 000 damages for a freight train conductor who was alleged to have been seriously and permanently injured to the extent that he was rendered unable to work had his health destroyed suffered partial paralysis of his lower limbs from the hips down and constantly suffered from mental anguish and pain The court was satisfied by the evidence that he had been made a physical wreck and a constant sufferer both physically and mentally, and says that it is unable to see why his mental sufferings in contemplating his changed condition from a bright happy life to a living death should not form one of the natural results of such an injury, and a proper subject of evidence and of damages

Extent to Which Physician's Return is Evidence—The Supreme Court of Illinois holds in the case of Howard vs the Illinois Trust and Savings Bank that the rule which makes official registers of births and deaths admissible in evidence to prove the facts recorded without the usual tests of truth includes only those facts which occur in the presence of the physician making the return The return is not evidence of matters of mere hearsay gathered up by the physician, of which he knows nothing It is only evidence of facts necessarily within the knowledge of the person making the entry where fore for example the court holds that a physician's return was not evidence that the child the birth of which was reported was his mother's second child

Medical Examiner made Agent of Company—The Supreme Court of Rhode Island holds in the case of Leonard vs the New England Mutual Life Insurance Company, that where an application for life insurance says, "The medical examiner will put the following questions, and fill out the answers in his own handwriting" this clearly makes the examiner the agent of the company for this purpose, and the company writes the answers as with its own hand Moreover in view of the facts in this case, that the application in question was signed without written answers to the medical part, that it was handed to the expressly authorized agent of the company to receive both the answers and the application, that there was nothing to show that the answers as given were false and that under the terms of the application the examiner was acting for the company, and not for the insured in writing down the answers, the court sees no valid ground of objection by the company to a finding which must result in excluding them from being any part of his application And it holds that if the answers were correctly given, as must be assumed in this case, and mistakenly or wilfully written wrong—the application having been accepted in blank—the fault would lie with the insurance company, and not with the insured

Insanity that Will Prevent Pronouncing of Judgment—The Supreme Court of Arkansas says, in the case of State vs Helm, that the reason of the rule for prohibiting the trial of a person while he is insane is the incapacity of one who is insane to make a rational defense, and for prohibiting the pronouncement of judgment against him while he is insane is, if sane, he might be able to show cause why judgment should not be pronounced against him but, being insane, though having a sufficient cause he might not make it known It also concludes and decides that if a person convicted of a crime is, by reason of a disease of the mind unable to understand the nature of the indictment upon which he was convicted, and the verdict thereon, when explained to him by the court, and is unable to comprehend his own condition in reference to such proceeding and by reason thereof might not make known to the court or the attorneys in charge of his defense the facts within his knowledge, if any, which would show that judgment should not be pronounced against him, he is as to the pronouncing of such judgment to be deemed insane, within the meaning of a statute which forbids the pronouncement of judgment against any person while he is in a state of insanity But ignorance of the law it holds, is not competent or sufficient to show such incapacity And it holds that an instruction should not have been given which authorized the jury to find the defendant insane if they found from the preponderance of the evidence that he could not intelligently reason"

Power to Exclude Unvaccinated Pupils—The Supreme Court of Pennsylvania has affirmed the decision of the court of common pleas in the case of Charles J Field vs Martha I Robinson principal of the Keystone public school in Philadelphia, referred to on pages 101 and 167 of volume xxxv of THE JOURNAL Here it was sought by mandamus to compel the principal to admit to the school a pupil without a certificate of having been vaccinated or had the smallpox The principal's answer was that, under the act of 1895 she was compelled to exclude the child This answer was demurred to and the demurrer overruled The 'per curiam (by the court) opinion of the supreme court is, in full, as follows 'We think the court below did not err in the ruling referred to in the assignments In Duffield vs School District 162 Pa 476, we held that school directors, in the exercise of a sound discretion, may exclude from the public schools pupils who have not been vaccinated Whether a resolution excluding from the school pupils who have not been vaccinated is a reasonable one is to be judged of in the first instance by the school directors In the present state of medical knowledge and of convincing opinion of those having charge of the public health the courts will not say that such a resolution is an abuse of official discretion' It has not been shown to our satisfaction that the act of June 18 1895 (P L 203), is unconstitutional For the reasons above stated, we dismiss the assignments and sustain the conclusions of the court below Judgment affirmed"

Physical Condition as a Collateral Issue—The Supreme Court of Iowa says, in the breach of promise case of Vierling vs Binder, that it is true no doubt, that physical defects or disease which incapacitate the woman for the marriage state or for the birth of children if unknown to the other party to the contract at the time the contract was entered into, may be pleaded and proven in bar to an action for breach of the contract of marriage Likewise the incapacity or unfitness of the man for the marital relation, accruing after the making of the contract, without his fault or unknown to him at the time the contract was made, may be shown But the diseased condition of the plaintiff, which the defendant set up in this case, was alleged as bearing on the question of whether the defendant had entered into any contract of marriage, and not as a bar to the action for breach of contract Wherefore, the supreme court holds that the trial judge properly limited the jury, in the consideration of the evidence as to the plaintiff's physical condition, to the question of whether a contract of marriage was made and properly refused to give instructions asked by the defendant directing the jury to consider this evidence as

tending to show that he was not liable for breach of the contract if made Furthermore without discussing the question whether if the defendant had properly pleaded such defensive matter as a bar a physical examination of the plaintiff by physicians to be appointed by the court could have been ordered on the defendant's motion for the purpose of determining whether her physical condition was such as to present an obstacle to marriage, the court holds that it was not error to refuse to sustain such a motion in this case It says that, as bearing on the question as to whether the defendant did promise to marry the plaintiff the evidence of her physical condition was collateral only, and did not relate to the matter immediately under investigation Certainly a physical examination should be ordered only when it is necessary to determine the existence of the very cause of action or defense pleaded in the case Such an examination is for the purpose of bringing before the jury as nearly as may be the real evidence relating to the cause of action or defense

Current Medical Literature

Titles marked with an asterisk (*) are noted below

Boston Medical and Surgical Journal, May 16

1 *The Treatment of Psoas Abscess by Incision Robert W Lovett
2 *Infantile Scorbutus John Lovett Morse
3 Neuritis Recurring after Atrophy of Both Optic Nerves in a Case of Brain Tumor Edward R Williams
4 A Case of Accidental Inoculation of Cancer in a Fresh Wound A T Cabot

Medical News (N Y), May 18

5 *On the Modern Treatment of Acute Gonorrhea George Knowles Swinburne
6 Chronic Gonorrhea John Van Der Poel
7 On Gonorrheal Conjunctivitis Ward A Holden
8 Treatment of Gonorrheal Stricture of the Urethra James R Hayden
9 The Treatment of the Complications of Acute Gonorrheal Posterior Urethritis James Pedersen

Philadelphia Medical Journal, May 18

10 *The Disinfection of Wounds with Pure Carbolic Acid Dr Von Bruns
11 A Further Report on a Case of Presystolic Murmur Associated with Pregnancy, etc, Originally Reported at the Meeting of the Association in May 1899 James Tyson
12 An Exceedingly Rare Case of Imperforate Anus Charles B Kelsey
13 *The Relation of the Public to the Medical Profession Wm H Thomson
14 Gastric Tetany with Report of Cases Wm Gerry Morgan
15 *The Functional Tests of Hearing William L Ballenger
16 Report of a Case of Rupture of the Eyeball from Contusion—Luxation of the Lens—Hernia of the Iris and Ciliary Body J W Sherer
17 Anisometropia Norburne B Jenkins

Medical Record (N Y), May 18

18 *The Recent Buffalo Investigations Regarding the Nature of Cancer Roswell Park
19 *Contracture of the Neck of the Bladder Charles H Chetwood

American Medicine (Philadelphia), May 18

20 Disease and Deformity of the Knee Etiology Diagnosis and Treatment Daniel W Marston
21 *The Toxin of the Colon Bacillus Victor C Vaughan
22 *A Plea for Uniformity of Technic in Widal's Reaction Randle C Rosenberger

New York Medical Journal, May 18

23 *The Pathology and Bacteriology of Uretero intestinal Anastomosis (Concluded) F Robert Zeit
24 *Air, a Factor in Digestion Edwin W Moore
25 *The Proper Administration of the Schott Exercises Victor Neesen
26 *The Use of the Suprarenal Capsule in Diseases of the Heart (Concluded) Samuel Floersheim
27 Relations of Vascular Disease to Heart Disease William H Thomson

Cincinnati Lancet-Clinic, May 18

28 Valedictory Address Cincinnati College of Medicine and Surgery W H Wenning
29 Progressive Medicine Franklin H Lamb
30 Valves of the Rectum Geo J Monroe

St Louis Medical Review, May 18

31 *Ureter Catheterization in the Male A New Ureter Cystoscope Bransford Lewis
32 *Veratrum Viride R C Atkinson
33 What Should be the Legal Requirements for the Commitment of Insane Persons to Hospitals for Care of the Insane A B Richardson

Medical Age (Detroit, Mich), May 10

34 Clinical Lectures in Neurology Harold N Moyer
35 The Practice of Medicine as a Source of Income D A K Steele
36 The Artificial Anastomosis of the Portal and Systemic Veins Byron Robinson

Medical Fortnightly (St Louis), May 10

37 The Surgical Treatment of Fibroid Tumors of the Uterus with Specimens W W Williams
38 *Strangulated Hernia J J Brownson
39 Diseases of the Stomach (Continued) J M G Carter
40 *Research Experiments on the Physiological Action of Petroleum G Burbridge White

Archives of Pediatrics (N Y), May

41 The Blood in Infancy and Childhood (Concluded) Alfred Stengel and C Y White
42 The Value of the Widal Reaction in Infancy and Childhood John Lovett Morse
43 Experiences in an Epidemic of Typhoid Fever Fetal and Infantile Typhoid Scarlatina Complicating Typhoid, and Vice Versa J Finley Bell
44 A Case of Streptococcal Infection Successfully Treated by Antistreptococcus Serum J S Fowler

Journal of Nervous and Mental Diseases (Nyack, N Y), April

45 *The Clinical Value of Astereognosis and its Bearing Upon Vertebral Localization G L Walton and W D Paul
46 The Babinski Reflex C Van Epps

Journal of Nervous and Mental Diseases (Nyack, N Y), May

47 *A Study of the Cases of Tabes Dorsalis in Prof M Allen Starr's Clinic Columbia University, from January, 1888, to January, 1901 Allan Blair Bonar
48 *The Scapulo humeral Reflex of Von Bechterew William Pickett
49 Psychical Form of Epileptic Equivalent Charles Cary and Julius Ullman
50 Cases Illustrating the Different Diagnosis of Cerebral and Hysterical Hemi anesthesia Charles K Mills and Theodore Weisenberg

New York State Journal of Medicine (N Y), May

51 The Reason for the Existence of the New York State Medical Association Alvin A Hubbell
52 *Ulcer of the Placenta Umbilical Cord Severed Before Birth Eden V Delphely
53 *Problems in Etiology Diagnosis and Treatment of Tubercular Disease of the Upper Air Passages Jonathan Wright
54 Heart Disease J J Walsh
55 Unity of Action in the State Association Parker Syms

Physician and Surgeon (Detroit and Ann Arbor, Mich), May

56 *The Elimination and Curability of Syphilis William F Breakey
57 *Predisposing Causes of Pulmonary Tuberculosis Donald S Campbell
58 *The Early Diagnosis of Pulmonary Tuberculosis Preston M Hickey
59 A Short Sketch of the Surgical Treatment of Otitis Media Suppurativa Emil Amberg
60 The Nonsurgical Treatment of Diseases of the Middle ear Eugene V Riker
61 The Cause and Failure After Club foot Operations Daniel LaFerte
62 The Management of Trachoma Charles H Baker
63 The Etiology and Rational Treatment of Disease George I McCallum

Illinois Medical Journal (Springfield), May

64 *The State Care of Consumptives John A Robinson
65 *Sanitarium Treatment of Pulmonary Tuberculosis in Illinois Florence W Hunt
66 Observations as to the Efficiency of the Chicago Health Department Method of Fumigation Adolph Gehrmann
67 *Cholelithiasis J W Hairgrove
68 A Gynecologic Examination C C Hunt
69 The Colonial Treatment of Epilepsy Daniel R Brower
70 Diagnostic Sign of Smallpox J C Sullivan
71 Obstructions in the Pathway of Legitimate Medicine J H Miller
72 Surgical Introspection H W Chapman

Annals of Surgery (Philadelphia), May

73 *The Surgery of the Spleen J Collins Warren
74 *Concerning Prompt Surgical Intervention for Intestinal Perforation in Typhoid Fever with the Relation of a Case Harvey Cushing

75 *Operative Paralysis of the Spinal Accessory Nerve Pearce Bailey
76 Hydatid Cyst of the Prostate I Bolton Bangs
77 *The Surgical Treatment of Amebic Dysentery Francis W Murray
78 *Some New Points in Tendon Surgery I S Coolidge
79 *Some Errors in Diagnosis in Conditions Resembling Appendicitis George Emerson Brewer
80 *Rare Complications after Operations for Appendicitis Willy Meyer
81 Report of Three Cases of Properitoneal Hernia John Chadwick Oliver

Indiana Medical Journal (Indianapolis), May

82 Apparent Periodical Vomiting with Report of a Case B Van Swerlingen

Buffalo Medical Journal April

83 *Paresis and Cerebral Syphilis Arthur W Hurd
84 Surgical Complications of Typhoid Fever as Observed at U S General Hospital Fort Myer Va Vertner Kenerson
85 Excision of Hemorrhoids William I Dickinson
86 Functional Disorders of Digestion Clarence King
87 A Brief Resume of the Grosser Animal Nature and Its Application in Medicine G N Jack
88 Clinical Quantitative Analysis of Peptoids in Stomach Contents A L Benedict
89 Mental Aberration Consequent upon Pelvic Disease J G Hamley

New York Medicinische Monatsschrift April

90 *Einige Bemerkungen ueber Practische Harnanalyse Louis Heitzmann
91 Die Behandlung der Mittelohreiterung J Holinger
92 Ein Fall von Schwerer Morphiumvergiftung Subcutane Einspritzungen von Hypermangansaurem Kali geheilt Leonard Weber

Journal of Tuberculosis (Asheville N C), April

93 Primary Pharyngeal and Laryngeal Tuberculosis two Cases Cured J W Cleitsmann
94 *Ten Years Experience with the Tuberculins Chas Denison
95 Home Treatment of Tuberculosis Lawrence F Flick

Medical Summary (Philadelphia) May

96 Emulsion—Specimen Formule Robert C Kenner
97 La Grippe Geo J Monroe
98 Typhoid Fever etc Lloyd Clendenen
99 Is Malarial Hematuria Produced by the Administration of Quinin B I Wilson
100 A Review of Hypnotics and Nerve Sedatives C W Canan
101 Sugar and the Doctor Edwin W Pyle
102 Some More Dont s D H Keller
103 The Law of Growth and the Cause of the Action of All Remedies W T Ball
104 Some Notes Concerning the Administration of Quinin W Thornton Parker
105 The Seidlitz Salt W C Buckley
106 Fever and its Treatment J L Wolfe

Chicago Medical Recorder May

107 *Some Forms of Meddlesome Obstetrical Practice J Clarence Webster
108 Four Cases of Ureteral Surgery Edward Evans
109 *The So called Cardiac Neuroses Classification Etiology Pathology Lewellys F Barker
110 A Short Consideration of Some of the Points in the Pathology of Ulcer of the Stomach W A Evans
111 *The Surgery of Gastric Ulcer Edward W Andrews
112 *The Treatment of Ulcer of the Stomach James B Herrick
113 *The Gynecological and Obstetrical Significance of Girlhood Henry P Newman
114 *The Skull and its Contents W H Earles
115 Endocarditis in Children with Report of a Case Rosalie M Ladova
116 A Case of Atresia Ani Vesicalis Carl Beck

Hot Springs Medical Journal May

117 Surgical Treatment of Abdominal Dropsy following Cirrhosis of the Liver James T Jelks
118 Chronic Urethral Discharge due to Seminal Vesiculitis Donald Kennedy

Southern Practitioner (Nashville, Tenn), May

119 Removal of Foreign Bodies from the Trachea with Report of an Interesting Case Paul F Eve
120 A Modern Surgical Dressing W C Wile
121 A Corrector of Iodism W H Morse

Archives of Ophthalmology (New Rochelle, N Y), May

122 Some Advancements without Tenotomies a Description of the Operation Employed and Remarks upon the Theory of Advancements in Such Cases Herbert Wright Wootton
123 *Alcohol and Tobacco Amblyopia in Cuba C L Finlay
124 Angiosarcoma of Choroid Four Years Observation Kaspar Pischel
125 An Arterio Venous Aneurysm of the Retina Dr Seydel
126 *A Contribution to the Symptomatology and Histology of Primary Myxosarcoma of the Optic Nerve and the the Operative Removal of Such Growths by Kronlein s Method Th Axenfeld and Fr Busch
127 *Symblepharon Operation on the Double Inverted Upper Lip with the Suturing of a Transplanted Flap to the Tendinous Expansion of the Superior Rectus Muscle thus Forming a Permanent Retrotarsal Fold Hugo Wolff
128 *Changes in the Fundus in Pregnant and Lying in Women Bruno Bosse
129 *On the Nutrition of the Cornea Prof Ulrich

Texas Medical Journal (Austin), May

130 A Brief History of the Recent Outbreak of Smallpox in Guadalupe County and Remarks Wm Myers

Charlotte Medical Journal, April

131 Asthma Charles S Jordan
132 Intubation and Antitoxin in the Treatment of Laryngeal Diphtheria J W Long
133 The Surgical Treatment of Empyema Southgate Leigh
134 Determination of Sex a Review of the Subject, with Remarks C W Canan
135 Galvanic Electricity for the General Practitioner A G Servoss
136 Bromidrosis Pedis F R Millard

Medical Times (N Y), May

137 Acute Endocarditis Benign and Malignant with Illustrative Cases Thomas I Satterthwaite
138 A Clinical Lecture Delivered at the New York Post graduate Medical School and Hospital April 1 1901 Henry Dwight Chapin
139 Fecal or Intestinal Fistula Wilfred C Falick
140 Alcohol in the Practice of Medicine F A McSwain
141 Diseased Tonsils a Menace to Health C F Wahrer

AMERICAN

1 **Psoas Abscess**—The questions discussed are What is the result of incising psoas abscess as far as life and the function of the limb are concerned and if the incision is advisable what is the best method of operation Fifty four cases of psoas abscess treated at the Children s Hospital, Boston between 1890 and 1900 are analyzed to answer these questions The facts as to the age sex, duration and location of the disease site of abscess temperature mode of operation, after treatment, results time and cause of death, mortality, etc are all taken up in detail The practical conclusions, so far as they can be deduced from so small a number of cases are That fever is not necessarily an accompaniment of psoas abscess formation that where it does occur the prognosis is not so good as where it is absent, that the best method of operation is by a lumbar or an iliac incision, and preferably the latter It seems, on general principles desirable to avoid recumbency for long periods which makes drainage by an iliac incision almost impossible It seems, therefore, best to put on a plaster jacket almost immediately after operation, to enable the patient to sit erect and the abscess to drain almost from the first In this way the writer has obtained better results than by any other method

2 **Infantile Scorbutus**—Morse reports six cases of infantile scurvy and discusses the etiology treatment, etc Anemia and general malnutrition are probably the earliest symptoms, but are not alone sufficient to warrant the diagnosis Pain is almost always the first symptom occurring on motion or handling, is generally in the legs and next in the back and arms From the patient s unwillingness to move on this account, paralysis is sometimes suspected The extremities are often held rigid, and the legs usually flexed at the thighs and knees Swellings appear as the disease progresses usually at the ends of the diaphyses and pyriform or symmetrical in shape They are due to subperiosteal hemorrhage If this is extreme separation of the epiphyses may result Sponginess and swelling of the gums are the most common symptoms that appear later Cutaneous hemorrhages are common in severe cases Hemorrhages from the nose, stomach and bowels are not very infrequent in the worst cases and hemorrhages at the orbit may cause proptosis Hematuria is rare and albuminuria rather infrequent Fever is not a prominent symptom and usually accidental The pathologic lesions are briefly anemia hemorrhage and ulcerative stomatitis Nephritis is an uncommon complication The diagnosis is from

rheumatism, purpura, rickets, syphilis, Pott's disease, infantile paralysis and injury Rheumatism is rare at the age at which this disease occurs Purpura may be confusing in very severe forms, though the order of the symptoms is somewhat different The early symptoms in scurvy become the latest in the purpura Compared with rickets the diagnosis is easy, and if there is any question the condition is almost certainly scurvy Syphilis is also characteristic and generally easily distinguished Pott's disease is rare in the first two years of life Injury might be suspected if there has been a blow or fall, but other signs usually prevent confusion An unaccountable stomatitis with general hyperesthesia and pain on being removed, especially if it occurs on the child's being taken up, and in bottle fed babies, should excite suspicion The chief, if not the sole cause of infantile scurvy is found in the diet, but it is sometimes difficult to see to what error scurvy is due Generally it occurs in babies fed on prepared foods, but at present it is impossible to draw any definite conclusions as to just what elements in the food are responsible The conclusions of the Committee of the American Pediatric Society seem within our knowledge, and more specific ones are considered hardly justifiable They are, viz "1 The development of the disease follows in each case the prolonged employment of unsuitable diet 2 In general, the farther a food is removed in character from the natural food of the child, the more likely it is to be followed by scurvy' In unrecognized and untreated cases death may occur but with proper treatment recovery is certain Treatment consists in the regulation of diet and the administration of orange or lemon juice, either alone may be sufficient but a combination is best No drug is of any use Quiet on account of pain is advisable

5 **Gonorrhea** —The modern treatment of gonorrhea depends largely upon the microscopic diagnosis, which is insisted upon by Swinburne, and we cannot intelligently treat the disease without it The findings of the microscope, however, may be misinterpreted, and he gives an instance in which the absence of the gonococci, after the use of a protargol injection, led to a serious mistake In acute gonorrhea we have a self limited disease, which, however is capable of becoming indefinite in duration by neglect, maltreatment or lack of constitutional vigor The earlier the diagnosis and treatment the better the results The germicide treatment favored by the author is the use of protargol in 5 to 2 per cent solution heated for ten minutes He dilutes this with a 2 per cent cocain solution at first gradually reducing the cocain with subsequent injections If the case presents itself with the disease in full blast, this is still the best treatment, and if considerable progress has been made he still advises local treatment rather than wait for the decline In the case of infection of the posterior urethra he uses a soft rubber catheter with a fountain syringe, passing the solution well into the bladder, it being shortly after urinated out It is important in all cases that the patient should call for examination six weeks after all treatment has ceased to be sure of success

10 **Carbolic Acid** —Von Bruns recommends the use of pure carbolic acid as an application to wounds, immediately following it or counteracting it with alcohol, according to the method described by Phelps He thinks that carbolic acid applied but once markedly influences the condition of septic wounds, making their course simpler and less interrupted than is ordinarily observed

13 **The Public and the Profession** —The chief theme of Thompson's article is the need of public education on medical matters, which would do away with the popular delusions of "Christian Science," etc if thoroughly carried out

15 —See abstract in THE JOURNAL of March 30, p 912

18 **Cancer** —The article by Park reviews some of the main conditions and findings in cancer, especially those reported in the Buffalo laboratory, which have been recently published by Gaylord It is an argument for the infective and protozoan theory

19 **Contracture of the Neck of the Bladder** —The condition here mentioned as contracture of the bladder neck, consists of fibroid stenosis of the vesical sphincter or the fibrous infiltration of the glandular or muscular tissue encircling the neck and simulating, symptomatically, stone in the bladder and resembling senile prostatic hypertrophy by the obstruction it produces The special instrument devised by the author and his method of operating, which is similar to the Bottini operation excepting that it is made through a perineal opening are described A number of cases are reported

21 **The Colon Bacillus** —A previous article by Cooley and Vaughan, reporting attempts at isolation of the toxins from the bacilli cells, is mentioned and the facts learned in regard to the substance obtained are here summed up in the following 1 The toxin is contained within the germ from which it does not, at least under ordinary circumstances, diffuse into the culture medium 2 The toxin is not extracted from the cell by either alcohol or ether 3 Very dilute alkalies do not extract the toxin from the cells 4 The germ substance may be heated to a high temperature in water without destruction of the toxin 5 Boiling with a 2 per cent solution of hydrochloric acid has but little, if any, effect upon the germ cell or its contained toxin 6 Heating the germ substances for hours at a temperature of the water bath, with water containing 1 to 5 per cent of hydrochloric acid, breaks up the cell walls and lessens, but does not destroy, the toxicity of the cell content Prolonged heating may render the toxin inert 7 The toxin is separated from the cell wall by the digestion of the latter with hydrochloric acid, and pepsin is markedly active Each of these propositions is demonstrated by experiments that are here detailed There are many questions which the authors do not feel free to answer such as How is the toxin set free when the germ is introduced into the animal? What is the chemistry of the toxin? Is it a definite compound or is it composed of many substances as mentioned by Ehrlich in his theory concerning the constitution of toxins? Does not the bacterial cell contain both the toxin and an immunizing body or may the toxin be changed into an immunizing substance, either by artificial means or in the animal body? These questions await further study The fact, however ,that at least one of the bacterial toxins is a remarkably stable body, and can be retained in a dry stage in permanent form, justifies us in taking a somewhat more optimistic view concerning the probability of ascertaining the chemical constitution of these bodies than that recently expressed by Brieger and accepted by Ehrlich

22 **Widal's Reaction** —Difficulties in the recognition of Widal's reaction are pointed out by Rosenberger, who remarks on various methods and modifications that have been advised Among these he mentions the time limit, which some observers think should occur within fifteen minutes, others requiring longer time The method of preparing the dilution, the variations in the tests made, size of loop, etc, are also noted, and the points emphasized are 1 The use of a uniform dilution 2 A definite time limit 3 An agreement as to what constitutes a positive reaction 4 The use of a culture of definite age, and a clear statement as to incubation or non incubation 5 A decision as to whether dried blood, fresh blood or serum is to be used 6 A stated number of tests to be made in a given case 7 To drop the terms "doubtful" and "pseudo" reaction 8 Use of terms "positive" and "negative" only

23 **Uretero Intestinal Anastomosis** —The conclusions of Zeit's article are that 1 Descending infection always results from ureteral implantation into the rectum The bacillus coli communis is the infecting germ 2 The primary mortality is large, 84 per cent in any operation 3 In 120 dogs operated on, 91 per cent died of peritonitis due to leakage of the urine and general sepsis and pyelonephritis during the first ten days 4 Dogs living a longer time died of pylonephritis, pyelonephrosis and pyemia 5 Dogs that apparently recovered had granular contracted kidneys due to induration and cicatrization of diseased areas The rectum acts as a fair substitute for the bladder in such cases 6 Dogs which had fully recovered from unilateral implantation were living by the other kidney, that of the side operated on being atrophied and granular from an earlier pyelonephritis The active kidney was two to eight

times the size of the atrophic one 7 A review of the literature shows that no better results can be expected in man than in animals 8 The ureters are frequently dilated but show little or no disease no matter how extensive the kidney infection 9 The bladder is always infected by the way of the urethra whether emptied by operation or not A purulent cystitis from staphylococcus and bacillus coli was found in every case 10 An artificial immunity to infection by the colon group is the only hope of making uretero intestinal anastomosis feasible

24 **Air in Digestion**—Moore's article insists on the importance of pulmonary aeration of the blood as a final factor in nutrition

25 **Schott Exercises**—Neesen's paper gives the proper method of making the resisting exercises of the Schott treatment, with illustrations

26 **Suprarenal Capsule**—The final installment of Floersheim's paper gives cases and concludes by saying that after administration of the suprarenal powder 1 A weak and irregular acting heart became stronger and more regular 2 A dilated heart was contracted 3 A diffused apex beat became localized 4 A diffused loud and rough mitral regurgitant murmur became localized smoother and lessened in intensity, while in some cases the murmur disappeared 5 A murmur which owing to the extreme weakness of the heart, could scarcely be heard became more distinct, thus aiding in the diagnosis 6 The normal cardiac sounds when indistinct, became clearer and more easily distinguished 7 In some cases a rapid pulse became less rapid in other cases a slow pulse became faster 8 Patients who were very weak, with organic heart disease, were improved 9 No effect was observed in organic heart disease when the pulse was strong and regular

31 **Urethral Catheterization**—Lewis describes a cystoscope devised by himself which has the advantage of being readily sterilizable by heat or steam and hot water and is especially adapted to ureteral catheterization and also of value for intravesical inspection and for applications to the vesical membranes

32 **Veratrum Viride**—The value and comparative harmlessness of this drug is mentioned by Atkinson who says he has never heard of any fatal cases of poisoning from its use

38 **Hernia**—The conclusions of Brownson's article are in substance as follows The danger of strangulated hernia is in delay In all cases of abdominal pain a careful examination should be made The mode of procedure will depend on whether the physician is a surgeon In any case gentle taxis may precede operative measures but if it still fails under anesthesia the surgeon should be called in Every case of hernia, strangulated or not should be subjected to radical cure

40 **Petroleum**—From an experimental investigation on animals, and also clinical experience with petroleum, White concludes that petroleum emulsion is inhibitory to the growth of putrefactive and pathogenic bacteria that interfere with digestion and is, therefore an agent for relieving flatulence, and an internal antiseptic By its stimulation of peristalsis and increased diffusion of intestinal contents it aids nutrition helps the natural movements of the bowels, relieves constipation and favors elimination Its weight increasing action is beyond doubt from the experiments recorded The weight gained under its influence is much greater in proportion than it or any other oil could afford even if digested and absorbed While petroleum is uncombinable and indigestible in itself when mixed with emulsion or digested food material the effect is very different It then causes an increased flow of this digested assimilated material through the portal system, and produces tissue more readily

42—See abstract in THE JOURNAL of May 11, p 1343

45 **Astereognosis**—Walton and Paul discuss the subject of astereognosis with special reference to its localization and publish a number of cases They find the symptoms present in a very large percentage of hemiplegics perhaps one third or more The difficulties of examining for it are noticed Every case of Rolandic disease coming under their observation since commencing this study has presented this symptom In most of these cases capsular lesion was indicated by the paralysis, and it can be fairly assumed that in such cases involvement of the posterior limb is common or that the sensory and motor fibers have no sharply defined line but are more or less mingled In case of complete hemianesthesia involving the trunk the condition is apt to be one of hysteria, with perhaps a superimposed organic lesion In such cases as reported here, where the astereognostic type of anesthesia is the initial or prominent symptom the authors say they must remain in doubt as to whether the sensory fibers of the internal capsules or cortical areas are primarily or solely involved, unless focal symptoms or other diagnostic features are added The practical advantage of localizing the affection lies in the assistance it would give in selecting the seat of operation in case of suspected tumor or other lesions capable of surgical relief Where there is no other localizing symptom than astereognosis, they think it would be a safe working plan in operable cases to select for the center of the area to be exposed a point in the ascending convolution at a height corresponding to the motor representative of the extremity involved Such cases however, will be few as compared with those in which the astereognosis is merely an additional symptom with others

47 **Tabes Dorsalis**—Bonar has analyzed cases of tabes which appeared in the neurological department of the Vanderbilt clinic since 1901 286 in number, comprising about 1 2 per cent of the whole number of cases Of these, 84 6 per cent were males and 15 38 per cent females, or a proportion of over 6 to 1 The various symptoms are discussed, and they are summed up in the order of their frequency, giving the percentage of cases in which each symptom was noted as follows Loss of knee jerks 95 2 changes in knee jerks, 3 69, Romberg symptom, 79 02, change in pupillary reaction, 78 67, pains in the legs 78 67, ataxia in legs 70 62, vesical disturbance, 62 23, paresthesia and numbness, 54 54, girdle sensation, 48 6 loss of muscular sense, 28 32, crises, 16 78, pains in trunk 12 93 optic nerve atrophy, 8 74, ataxia in arms, 7 69, pains in arms, 6 99, loss or diminution of sexual instinct, 6, pains in thighs 4 89 ocular paralyses (strabismus, diplopia, etc), 3 21, nystagmus 2 44 arthropathies 2 09, constriction around legs or thighs 1 74, tremors, 1 74, perforating ulcers of foot 1 39, muscular atrophy, 1 39, anosmia, 1 04, deafness 69, vertigo, 34 loss of taste, 34 These percentages are of interest considering the large number of cases studied Only one or two of the symptoms were not recorded in all the cases

48 **Scapulo Humeral Reflex**—Pickett has studied the scapulo humeral reflex of Von Bechterew which has its center in the cervical enlargement and is claimed by its finder as more constant than the biceps and triceps jerks or the scapular and palmar cutaneous reflexes It is elicited he claims, by the percussion hammer along the entire inner edge of the shoulder blade, most markedly, however, at the inner edge of the scapula near the inferior angle and consists in adduction of the corresponding humerus toward the trunk, often, also, in slight outward rotation, mainly produced by contraction of the infraspinatus muscle and apparently of the teres minor Occasionally, by extending to the deltoid and flexors, it leads to abduction of the arm and slight flexion in the elbow joint It is claimed by Bechterew that it is absent in poliomyelitis, in the spinal form of progressive muscular atrophy in neuritis involving the shoulder girdle muscles, is diminished or absent in muscular dystrophy and spinal rigidity, and is exaggerated in cerebral hemiparesis, especially when there is marked atrophy of the shoulder girdle muscle, 122 cases were examined by Pickett, of various diseases, including locomotor ataxia, Pott's disease, disseminated sclerosis, etc From an analysis of the results he finds that it is increased in lesions of the upper segment of the motor system (pyramidal tracts) and is diminished or absent in those involving the reflex path (peripheral

nerves or spinal cord), it is less constant than those involving the biceps or triceps It or a similar reflex may be obtained about as well at the point of the shoulder, may be elucidated at the base of the scapular spine as well as, or even better than, at the lower angle Its muscular components are so variable and extensive, and the reflex is so complicated and indefinite as compared with others, that he does not feel much confidence in any deductions drawn from it until clear post mortem data shall have established its exact correspondence with a somewhat limited portion of the cervical enlargement

52 —This article was abstracted in THE JOURNAL of March 9, p 681

53 —Ibid, xxxi p 1171

56 **Syphilis** —The principal point of Breakey's article seems to be the treatment of syphilis by aiding elimination and allowing Nature to take its course and produce secondary symptoms before applying the specific treatment The eruption is in a way eliminative and active specific treatment should not be advocated until the situation is clear and it has a certain prospect of doing good

57 **Tuberculosis** —The theory adopted by Campbell is that the predisposition to tuberculosis and scrofula is due to hereditary syphilitic taint not directly in the family but in the race The contagiousness of tuberculosis must depend upon this primary condition The question then is, can syphilis be subdued and controlled, and if it can we shall have accomplished more toward prevention of the spreading of tuberculosis and other kindred diseases than by all the other prophylactic measures that have been proposed

58 **Tuberculosis** —The importance of a thorough examination of a patient where tuberculosis is suspected is insisted upon by Hickey He thinks that the question of infection from tubercular areas other than the lungs should be carefully investigated the digestion and general condition thoroughly looked into the microscopic examination of the sputum more thoroughly resorted to and the physical signs specially studied Particular attention should be paid to the expiratory sound, since a diminished and weakened murmur, with prolonged and high pitched expiratory sound, is the earliest change to be recognized He thinks the x rays are likely to be a valuable aid in the early diagnosis, though he has himself as yet been unable to anticipate the results of auscultation by their aid

64 —See abstract in THE JOURNAL, xxxi, p 1491

65 —Ibid

67 —Ibid p 1415

73 **Surgery of the Spleen** —The conditions under which splenic surgery has been tried are enumerated, the operation itself is not a new one In malarial enlargement numerous operations have been made and the mortality is diminishing Splenic anemia is treated at some length and a successful case of splenectomy for its relief reported In splenic leukemia the operation has been almost invariably fatal Chronic enlargement in infants usually yields without operation In Banti's disease the mortality is not excessive and surgery seems to afford relief A number of other conditions, such as abscess, sarcoma, etc, are mentioned, and the operation has a much wider range than might be generally supposed The reduction in the mortality is largely due to judicious selection of cases The size of the spleen is less a contraindication than the adhesions it forms The operation is only distinctly contraindicated in such grave organic lesions as leukemia, cirrhosis of the liver, and amyloid disease In other affections its merits remain to be tested The after results are not constant, as a rule, except for the reduction of hemoglobin and red corpuscles and the increase of white corpuscles and these are only temporary and do not debar the patient from complete restoration to health after splenectomy A case is reported, besides the one mentioned, where sarcoma of the spleen resulted in death and one of splenic leukemia with recovery, reported in full detail one of rupture and one of splenoplexy

74 **Intestinal Perforation in Typhoid** —Cushing notices the hopeful feeling in regard to operation for this condition, which exists in this country as compared with Europe, and thinks that 37 cases of actual recoveries after perforation is a cause for congratulation, no matter what the number of failures may have been Up to the present time 12 cases in Osler's clinic have been operated on 5 have recovered, and some of the others would have been saved had they been operated on earlier, and had exploratory operation been considered justifiable, as is now the case It is now a custom there to keep the operating room ready for immediate use when there is a suspicious case of typhoid in the wards, and most careful watching is kept over all typhoid patients These, he thinks, will be the occasion of saving 50 to 60 per cent of the cases of typhoid perforation in the future Of the 12 cases, all but 3 have been previously reported one of the 3 is here given

75 —**Spinal Accessory Paralysis** —Post operative or traumatic paralysis of this nerve is treated by Bailey, and a case reported which is of interest as bearing on the question of the nerve supply of the sternomastoid and trapezius muscle He reviews other cases, and comes to the conclusion that there is more or less variation in this nerve supply While the sternomastoid seems to have its innervation from the accessorius, the trapezoid may be supplied also by some of the cervical nerves He takes the variation to be as follows 'The spinal center situated between the first and fifth cervical segments of the cord is fixed and constant As a general rule the cells of this center send their axones to the trapezius through both the spinal accessory and the cervical nerves But sometimes there is a variation from this arrangement, in that all the axones pass to the muscle in the spinal accessory, leaving the cervical nerves without function, as far as the trapezius is concerned Under these circumstances the motor impulses reach the trapezius exclusively through the spinal accessory, and section of it consequently means total palsy"

77 **Colostomy for Chronic Dysentery** —The method of treatment advocated for chronic cases of amebic dysentery failing to respond to medical treatment, by Murray is the production of an artificial anus early in the disease He would recommend this if after four months of medical treatment the dysentery is not cured Setting the colon at rest is the only reliable method He would leave the artificial anus open for a long time and it should not be closed until it is certain that the ulcer has healed This can be ascertained by the long rectal tube of Kelly This method is not of recent date, but has been carried out successfully for several years, in cases of ulceration of the sigmoid and rectum and by English surgeons in membranous colitis, but it has not been generally put in practice in case of chronic dysentery He reports a case

78 —**Tendon Surgery** — The utility of tendon surgery is pointed out by Coolidge who emphasizes the necessity of special study of the muscles involved and transplanting or ligating living tendon to replace the paralyzed ones if it can be done The important points to be considered are 1 The time of operation, which should not be until the reparative process, after the attack of infantile paralysis has reached its limit 2 The amount of strength of muscle to be grafted as compared with the work it will be called upon to do 3 The location of the grafting 4 The method of joining the tendon together 5 The choice of material, the chromicized catgut with a life of four to six weeks ought to suffice 6 The post operative treatment should be at least four weeks in the plaster bandage then massage and passive movement, usually with some appliance to keep the foot in its proper position, for a couple of months more The use of tenotomy in spastic cerebral paralysis is also mentioned, and cases reported

79 —**Appendicitis** —Brewer reports cases illustrating the errors of diagnosis In 2 the symptoms were found to be due to renal calculi in 4 to disease of the uterine appendages, in 1 to sarcoma of the ileum in 1 to cholecystitis in 1 to suppurative pancreatitis and in 2 to general sepsis The cases are reported in detail

80—**Complications of Appendicitis**—The complications mentioned by Meyer are thrombosis of the femoral veins, of which he reports two cases and discusses the cause He is inclined to believe in the infectious origin of this condition though the mechanical theory as brought out by Lennander can not be lost sight of Another complication is intestinal obstruction occurring sometimes after operation for acute perforative peritonitis In the first case reported the cause of the obstruction was concluded to be abscess perforation into the descending colon upon the occurrence of which a coil of the small intestine which had been under great tension during the full expansion of the abscess became kinked on its sudden withdrawal, and thus formed the cause of obstruction The second was obstruction from a minute band passing from the cecum over the small intestine to the root of the latter s mesentery which was successfully relieved

83 **Paresis and Cerebral Syphilis**—Hurd holds that there is a difference between true paresis and syphilitic pseudo paresis and quotes Meckel s table of points of differential diagnosis One of the strongest points he maintains is the different results of specific treatment in cases of syphilitic history and with lesions apart from cerebral He does not fully accept the dictum of no syphilis no general paralysis though admitting the predominance of syphilitic antecedents He calls attention to a clinical manifestation of the paresis which he thinks is quite rare that is the sudden and acute exacerbation after a more or less prolonged prodromal period with symptoms of low grade cerebral inflammation and holds it is probable that there is here a true localized inflammation of the brain substance distinct from motor tracts and the basal ganglia Another point that he especially notices is the influence of a traumatism or an ordinary attack of insanity in the induction of paresis

90—This article has appeared elsewhere See THE JOURNAL of May 4 ¶ 32 p 1279

94 **Tuberculin Treatment**—Denison has experimented with Tuberculin treatment in a large number of cases, with Kleb's tuberculin and antiphthisin Mumford s asses serum, Fisch's antiphthisis serum T R Hirschfelder s oxytuberculin von Ruck s tuberculin and his watery extract he tabulates the results The best results were obtained with the watery extract Out of 45 cases thus treated 28 or 62 per cent are living in apparent immunity 40 of these apparently cured 49 per cent much improved and only 11 per cent retrograded This method of treatment however covers a shorter period than the others which perhaps should be considered in the estimation

107 **Meddlesome Midwifery**—Webster protests against the use of antiseptic douches which are unnecessary in the absence of any local or chronic infection or venereal disease of the vulva vagina and cervix though in such cases vigorous use of an antiseptic may be necessary He reviews the literature of the normal and pathologic bacteriology of the vaginal contents at considerable length, as supporting his view that prophylactic douching in the majority of cases is unnecessary Contamination is sometimes produced by unnecessary vaginal examinations by the physician or nurse and he insists on the importance of cleanliness and believes that boiled rubber gloves should always be used The over use of the forceps is also deprecated and he gives a tabulated statement of the percentage of cases in which these are used in the leading European clinics

109 **Cardiac Neuroses**—The anatomic and physiologic data as far as their bearing on the production of these conditions is concerned are noticed by Barker He makes the suggestion that there is much to be hoped for from an analysis of irregularities based upon modern physiologic and pharmacologic research The most important feature of such analysis at present is in the emphasis laid upon the importance of the heart muscle itself He thinks it would be well to be chary in the future use of the term "cardiac neurosis' until the dynamics of the processes concerned are better understood and suggests grouping them simply under the term "disturbances of cardiac motility

111 **Gastric Ulcer**—Andrews reviews the methods and indications of surgical interference in case of gastric ulcer, and offers the following conclusions 1 Gastric ulcer is a surgical disease 2 Perforating ulcer should be treated by laparotomy as early as possible 3 Bleeding gastric ulcer should be treated by operation after resisting medical treatment 4 Gastric ulcers produce, and are also caused by pyloric obstruction, and this calls for operation Many obscure and obstinate stomach troubles are caused by this cicatricial obstruction and can be cured very safely by surgical intervention

112 **Gastric Ulcer**—Herrick describes in detail the method and technique of the rest and rectal feeding method of gastric ulcer which he thinks offers the most favorable conditions to aid the natural tendency of the lesion to heal, and should receive more attention in text books and other medical writings It consists in putting the patient to bed under the care of a trained nurse emptying and cleansing the bowels allowing no food to be given at first except possibly water in small amounts giving a cleansing enema high in the rectum at regular intervals of four hours As the pain, tenderness and vomiting decreases or ceases the rectal feeding is gradually stopped and feeding by the mouth with a specially prepared diet substituted The patient is not allowed to get out of bed until rectal feeding has been entirely stopped and food been taken alone by the mouth for several days and resuming of activity should be gradual The whole treatment may last for two to six weeks at least and possibly longer

113 **Girlhood**—The points made by Newman are the importance of the proper physical training of girls during the developmental period of puberty and the prevention of lack of development of the cervix and uterus, which is a serious handicap to their future sexual life, and possibly may result in serious and even fatal conditions after marriage For this condition of undeveloped cervix he suggests dilatation under anesthesia supplemented by plastic work to restore the cervix and maintain a proper lumen as better than subjecting the patient to a course of local treatment in the gynecologic chair

114 **The Skull and its Contents**—Earles s paper calls attention to the importance of dural and sclerotic conditions in the cortex following injuries as being responsible for many epileptic seizures and other troubles, and he advises the uses of the trephine or chisel in every case of severe injury to the head as evidenced by the symptoms and degree of force received Careful examination of the soft parts and immediate repair of the injuries should be done as soon after the injury as the circumstances will permit, to avoid sclerosis When this has been thoroughly established, the sclerosed area should be thoroughly excised and care be taken that the offending area is the one removed

123 **Alcohol and Tobacco Amblyopia in Cuba**—Finlay finds that both Cubans and Spaniards in Cuba are far from being immune to alcohol and tobacco amblyopia, and presents 92 cases which he has met with in a total of 4300, 5 cases of purely alcohol 31 of tobacco and 56 from mixed alcohol and tobacco amblyopia The cases are given in a tabulated form

126 **Myxosarcoma of the Optic Nerve**—After reporting a case in which a myxosarcoma was removed from the posterior orbit, surrounding the optic nerve with microscopical examinations, Axenfeld and Busch call attention to the noteworthy features, which are 1 The periodic variation of the exophthalmus, with accompanying fever 2 The almost perfect acuteness of vision and complete field on the day of operation after the exophthalmus had lasted eight months and a considerable tumor of the nerve had developed 3 The extirpation of the tumor by Kronlein s method, with permanent preservation of the ball 4 The extensive improvement of the paralysis of the ocular muscles after the operation 5 The condition and distribution of the medullated fibers in the optic nerve 6 The existence of hyaline cartilage in the nerve

127 —**Symblepharon Operation** —The difficulty of making a permanent retrotarsal fold is considerable in all the symblepharon operations hitherto practiced From a study of the anatomy, Wolff concluded that the tendinous expansion of the superior rectus, which lies just beneath the conjunctiva, is the natural insertion of the upper conjunctival arch, and might serve as the desired fixed point of attachment for the new formed upper retrotarsal fold He has recently had the opportunity to give this operation a trial and reports the case In future cases, he says, he will do the operation in the following manner After separating the adhesions until the upper lid can be doubly everted, a horizontal incision will be made in the expansion of the rectus, where the retrotarsal fold should lie Then, in order to prevent excessive swelling, the lid will be replaced, and perhaps tampons be introduced to check the hemorrhage After dissecting up the flaps the lid will be everted, so that the flaps may be sutured to the expansion of the rectus in the manner described It would seem better to cover the tarsal wound also, so as to prevent later a growing over it of the transplanted flap and to avoid the checking of the movements of the upper lid The advantages of the method lie in the fact that all the available anatomical and pathological relations are taken into consideration 1 The transplanted flap is attached to the fornix as a natural point 2 From this it follows that the flap is capable of following all the changes of position of the lid with respect to the eyeball 3 The transplanted flap is, through this fixation, better adapted to its surroundings and to its base, and therefore more readily becomes attached 4 Later the expansion of the rectus exercises a constant traction on the new formed fornix in the direction of the depth of the orbit, and thus prevents the shrinking that often occurs later

128 **Changes in the Fundus in Pregnancy** —From a study of 124 gravid women, ranging from the fourth month on, about one half of them in the tenth month, Bosse concludes that "in a large number of pregnant women there are changes in the fundus, located at the optic disc, and consisting in cloudiness and swelling due to venous stasis and transudation These neuritic changes are innocent in that functional disturbances of the eye do not occur, or at least are not subjectively recognized, and that they appear soon after labor without distinction as to whether it is the first pregnancy or a later one '

129 **Nutrition of the Cornea** —Ulrich experimented on transmission of the fluids through the endothelium on Descemet's membrane, which he thinks does not check the entrance of the aqueous humor into the cornea, but only limits it He uses ferrocyanid of potassium in his experiments, and he finds that a small amount of aqueous humor thus entering is carried off toward the conjunctiva, thus preventing opacity and swelling He also made experiments to see the effect of scar tissue which seemed to show that it is less capable of imbibition than the normal corneal tissue, and that perhaps the lymph circulation offers certain hindrances

British Medical Journal, May 11

Experiments upon the New Specific Test for Blood GEORGE H NUTTALL and E M DINKELSPIEL —The recent discovery of specific precipitins that act on various bacterial products—milk, peptone, eggs, albumin and different kinds of blood—has led the authors to undertake the investigation, of which the present paper gives an abstract They injected rabbits intraperitoneally with horse, dog, ox, sheep, and human serum, and were able to observe the formation of specific precipitins in their blood, the antiserums from these animals being tried on twenty four different bloods with uniformly negative results, excepting a slight action exerted by the antiserum for human blood on the blood of two species of monkey, where a slight reaction was obtained not at all comparable in intensity to that shown on the addition of the antiserum to human blood A slight cloudiness was produced by the antiserums for ox blood when added to sheep's serum, and *vice versa* Some animals already gave an effective serum after the third injection Bloods which had been dried for two months and preserved at room temperature in the dark or daylight, or in the dark at 37 C, and also such as had been exposed for a week to sunlight, as well as serum from a blister, the result of a burn, all gave positive reaction when tested for their particular antiserum Some human blood which had undergone putrefaction for two months, when diluted 1 to 100 with normal salt solution, gave a marked reaction with the antiserum for human blood, which it did not do with other blood serums A rabbit that was treated with some old antidiphtherial horse serum preserved with tricresol in a corked bottle for two years and seven months yielded a specific precipitin for horses' serum Positive results were also obtained by treating a rabbit with a pleuritic fluid which had been kept in the laboratory for from five to six months and preserved by the addition of chloroform A slight but distinct reaction was obtained with human nasal and lachrymal secretion Dilutions of human blood—1 to 100—mixed with an equal volume of dilutions of the blood of ox, sheep, dog and horse and tested for human blood, all gave a positive reaction, and *vice versa* The control experiments with normal rabbits' serum, as also with non-homologous antiserums gave negative results These investigations confirm and extend the observations of others with regard to the formation of specific precipitins in the blood serum of animals treated with various serums The authors, therefore, conclude that these precipitins are specific, although they may produce a slight reaction with the serums of allied animals The substance which brings about the formation of precipitins, and the precipitin itself, are remarkably resistant This new test can be applied to blood which has been mixed with that of another animal, and the authors claim that we have in this test the most delicate means thus far discovered for detecting and differentiating bloods, and trust it will be put to forensic use

The Lancet, May 11

The Importance of the Teaching of Insanity to the Medical Student and Practitioner in Relation to the Prevention of Insanity ROBERT JONES —The responsibility of the doctor in cases of insanity is first alluded to, especially as regards certifying cases, and Jones notices the needs of special knowledge in this regard The doctor is, moreover a consultant in regard to engagements, marriages, civil and testimonial capacity etc, where such knowledge is essential also in cases of criminal responsibility, and he should have some knowledge also of the subject of anthropology and the signs of degeneracy The severe mental symptoms arising in the course of bodily disease may also call into play his best efforts Another of the chief reasons why the medical student should be made familiar with insanity is that it is best treated in its early stages, hence the importance of its early recognition We are probably on the threshold of important discoveries in regard to this matter, and the need of research is emphasized The student should be conversant with neurologic methods, especially in histology, should know the changes in the normal secretions, should be familiar with the use of physiologic instruments blood examinations, etc A knowledge of psychology or mental physiology is also urged and the different forms of insanity should be described in a systematic course of lectures, illustrated by actual cases in hospitals and asylums Jones advocates the issuance of a diploma in mental medicine similar in scope to that in public health, and requiring it to be obtained by all who wish to be medical officers to asylums and hospitals of the insane and those attached to licensed houses for their case Finally, he would have every public asylum in the country a school for a post graduate course in mental diseases

Mental Fatigue in School Children JOSEPH BELLEI —The author examined 320 boys of the average age of 11 years 4½ months, and 140 girls of the average age of 11 years and 8 months, 460 children altogether by the methods of writing from dictation at various periods during the school hours to test the effect of school fatigue The conclusions he arrives at are as follows 1 No conclusion can be drawn as to the influence of single subjects of teaching 2 The first hour of lessons is a useful mental exercise, because the children are able during that time to overcome the state of inattention in

which they were at the time of coming to school 3 The morning lessons do not produce great mental fatigue 4 The midday rest is of great use to the children because it does not destroy the good effects of the mental exercise in the morning and enables them to do work of better quality than that which they produce after a long rest as one observes at the beginning of the morning lesson 5 Though immediately after the midday rest the children are in the best condition of mind, an hour or so of application in the afternoon is sufficient to produce such a mental fatigue as to lead at the end of the afternoon lesson to the worst work of the day Therefore if the morning application does not fatigue it consumes the mental energy of the children in such a manner that they can not undertake light work in the afternoon without falling into great mental fatigue

The Practitioner, May

Composition and Action of Orchitic Extract WALTER E DIXON—The author first notices the historic interest of this extract, showing that it was used by the ancient Romans and was employed up to the end of the seventeenth century, from which time it was dropped until Brown Séquard revived it The opposing views held by various persons as to its effects are noted, and he remarks that a very slight glance at the literature shows that tests have been made under widely differing conditions Some observers use the dried, others the fresh, organs some sterilize in dubious ways, and some administer the extract by the mouth The amounts used also vary widely These should be considered in estimating the value of the different opinions Brown Séquard and his immediate followers insisted on the use of the fresh extract and that it should be injected practically unaltered It is not fair to condemn their views from experiments performed in altogether different ways The composition of orchitic extract is noted It contains a large number of proteids almost entirely nucleoproteids also a number of extractives, among which is spermin with others in equal quantity and probably, at least, as important Orchitic extract has a decided action on animals, whether injected subcutaneously or directly into the circulation and the question arises which of the constituents is the active one Dixon considers the theory of Poehl that the spermin is especially active and an intra organic ferment of oxidation not confirmed by the facts The nucleoproteid is discussed at length and the author finds that it has a decided action in producing hypoleucocytosis in rabbits The diminution in the number of leucocytes is mainly at the expense of the polynuclear variety the lymphocytes being least affected It also produces a profound alteration in the appearance of the corpuscles, they have an ill-defined contour and show fewer granules, their nuclei are markedly swollen and stain more faintly with methylene blue When given by the mouth, however, it appears that an immediate hyperleucocytosis is produced and the excretion of PO_4 is increased, the reverse of which appears to be the case with its injection When injected directly into the circulation orchitic nucleoproteid has an effect upon both the heart and peripheral vessels The heart is slow the blood pressure falls and the peripheral vessels dilate, occasionally there is an initial short constriction The extracts of epididymis and vesiculæ seminales are similar to the extracts of testis, but the effect on the heart is less while the vasodilatation is greater Clinical experiments with orchitic extracts are not numerous but Pregl has found from the use of ergographic experiments that its injection leads to increased muscular efficiency and Zoth has obtained similar results Henocque found that Brown Séquard's injections produced a permanent increase in the hemoglobin in phthisis, and therefore, concluded that they had a beneficial effect on the blood There is yet much to be learned concerning the action of orchitic extract Its active constituent is not detected, but it is probable that experiments on eunuchs would lead to valuable results Orchitic injections administered as suggested by Brown Séquard have a powerful influence on metabolism, especially showing itself by changes in the urine in the leucocytes and in the blood pressure

The Ovary as an Organ of Internal Secretion WALTER E DIXON—The effect of ovarian extract is also studied by Dixon who notices the effect of castration, its influence on mammary secretion in animals all indicating the existence of an internal secretion and the fact that any portion of the ovary being left in the system, no matter where in the living condition, prevents the effect of their ablation is still further evidence The administration of ovarian extract in menstrual disorders and on women with induced climacteric as a result of double ovariotomy has been tried in many cases, and on the whole with beneficial results He sums up as follows 1 The presence in the body of ovarian tissue however small in amount is sufficient to prevent the distressing symptoms which frequently arise after complete double ovariotomy It does not appear to matter in what position in the body the portion of ovary remains, and even a transplanted ovary is sufficient to prevent the untoward consequences 2 The administration of ovarian tissue by the mouth exerts a beneficial effect in patients in whom menstruation has ceased in consequence of disease or complete ovariotomy, and many physicians advocate its use during the menopause 3 Ovariotomy has a distinct effect on metabolism, as shown by the diminution in gaseous metabolism the increase in body weight due to deposition of subcutaneous fat, and the diminished excretion of PO_4 in the urine In conclusion it may be asserted that the ovaries exert a decided influence over the organism as a whole, and all evidence is strongly in favor of the theory that this influence is the result of internal secretion which favors katabolic changes The secretion may be eliminated either as the result of disease or double ovariotomy, when the well known series of changes characteristic of the menopause are developed Castration, therefore both in the male and female deprives the organism of a stimulant of oxidation but no chemical substance has been isolated to which the properties of such an internal secretion can be ascribed It is probably different however in the two sexes

The Therapeutic Value of Suprarenal Preparations in Addison's Disease CHARLES R BOX—Experiments in the treatment of six cases of Addison's disease by the administration of suprarenal preparations keeping the patients under daily observation, two of these for a very prolonged period and observation of two other cases similarly treated, lead Box to the opinion that in these patients it would appear either that 1 the active substance has not been properly administered, or 2, the requisite material is not present in the suprarenal bodies as at present prepared for administration or 3 the lack of a certain internal secretion is not the sole or predominant factor in Addison's disease

Bulletin de la Soc Med des Hop de Paris, May 9

The Blister Test H ROGER AND O JOSUÉ—The serum of a blister contains a number of cells in suspension In health the polynuclear eosinophiles predominate, while they are scanty or entirely absent in the case of infectious diseases, although they reappear as the organism triumphs over the disease In chronic tuberculosis the number of polynuclear cells may attain or exceed 90 to 95 per cent In consumptives the cells seem to be swollen as if dropsical This appearance of the cells may sometimes reveal a latent, unsuspected tuberculosis The blister test is a valuable index of the intensity of an infection It is extremely sensitive, a trifling secondary infection superposed may alter the proportions of the cells in the serum

Lumbar Puncture for Persistent Headache of Bright's Disease P MARIE and LE GENDRE—Marie reports a case of severe headache in the course of Bright's disease, rebellious to all therapeutic measures He withdrew 6 c c of cerebrospinal fluid by lumbar puncture and permanently relieved the patient Le Gendre reports a similar case the patient a house painter a victim of lead poisoning, suffering from myosis, cephalalgia and insomnia The withdrawal of about 13 c c of cerebrospinal fluid restored him to comparative health

Journal de Medecine de Bordeaux, May 5

Raisins in Urotherapy P CARLES—When the urine is excessively acid Carles counteracts this tendency by administering an acid which becomes transformed in the organism into an alkali, such as potassium bitartrate for instance The

tartaric acid is consumed and the substance is transformed into potassium carbonate Being acid, it moderates the gastric acidity rather than stimulates it while during its transformation into an alkali it dissolves and carries away with it the uric acid generated in the organism, and re establishes the balance of the urinary acidity as it reaches the bladder The potassium bitartrate is more readily soluble when it is in combination with various organic matters as in grapes The sugars in the grape have also a diuretic effect When grapes are in season they are preferable, but during the remainder of the year Carles finds that Malaga raisins answer the same purpose and he prescribes 100 gm of raisins a day to be eaten at dessert Analysis shows that 100 gm of raisins contain half their weight of sugar and about 2 per cent of potassium bitartrate or other organic acid salts Combustion of this amount furnishes 7 3 cg of potassium carbonate or 50 cg of alkaline potassium and this potassium is able in turn to transform 90 cg of free uric acid into a neutral soluble potassium urate This is about the amount excreted in twenty four hours in health Five patients with urinary acidity three times the normal, were restored to normal in twenty four hours and the total amount of uric acid was diminished by the simple process of eating 100 gm of raisins during the day

Progres Medical (Paris), April 27

Idiocy and Diplegia in Two Brothers, Atrophy of the Cerebellum BOURNEVILLE—Two brothers were received at Bicêtre, aged 10 and 13 both presenting all the cerebrospinal symptoms of infantile cerebral spasmodic diplegia—both complete idiots The parents were healthy, free from alcoholic or syphilitic taint and their other five children were healthy One of the idiots died and the cerebellum was found in a pronounced condition of atrophy The pyramidal tracts in the spinal cord also showed symptoms of degeneration He had had measles at 18 months It is impossible to tell whether the other brother will show the same atrophy of the cerebellum at his autopsy Thomas was able to find only 28 cases of bilateral atrophy of the cerebellum, mostly post mortem discoveries in adults Only three cases are on record that date from childhood Bourneville is inclined to doubt whether this atrophy of the cerebellum is sufficient to explain the entire clinical picture which is duplicated in the brother

May 4

Transmission of Scarlet Fever to Cats E RAPIN—Some children with scarlet fever had a young kitten for a playmate and the latter soon exhibited all the symptoms of scarlet fever, including the period of desquamation and shedding its fur, which lasted for several weeks Another kitten brought to the children was affected in the same way and succumbed A similar experience in another family has convinced Rapin that very young kittens are susceptible to scarlet fever while older animals probably escape Behla doubts this transmission of scarlet fever except for pigs, which are peculiarly predisposed to eruptive diseases He mentions that a farmer used as bedding for his pigs the straw from mattresses on which four of his children had died from scarlet fever Two of the pigs soon died from a disease accompanied by a scarlet eruption Spinola admits that horses are liable to contract scarlet fever and Schneidemuehl suggests that the disease described by Petrowski, among sheep and goats may prove to be scarlet fever

Consanguinuity in the Etiology of the Chronic Nervous Diseases of Children BOURNEVILLE—All the cases of consanguineous marriages in the parentage of 2784 epileptics, idiots hysterics or imbeciles that have been treated at the Bicêtre hospital since 1879 have been carefully recorded Bourneville found among them a total of 91 cases or 3 23 per cent in which the parents were blood relations In 49 they were cousins, in 24 second cousins in 3 uncle and niece In the others the relationship was still more distant The 91 cases included 25 of idiopathic epilepsy 21 of symptomatic epilepsy and 16 imbeciles The proportion of 3 23 per cent is so small that he considers consanguinity a very insignificant factor in the genesis of the chronic nervous diseases of childhood He claims that marriage between cousins of vigorous constitution free from hereditary taint will result in healthy offspring If one or both of the parents are hereditarily diseased, the children will suffer, not from the consanguinity, but from the inherited predisposition

Semaine Medicale (Paris), May 8

The Heart in Chronic Articular Rheumatism E BARIÉ—Twenty five case reports of a cardiac affection complicating chronic rheumatism, including several personal observations are reviewed by Barié Pericarditis and endocarditis occur most frequently, with or without hypertrophy of the heart fatty degeneration of the myocardium or cardiosclerosis All kinds of pericarditis have been noted, with or without effusion In the former case it is usually hemorrhagic The endocarditis involved the mitral valve in four cases and the aortic in seven, but usually it causes an aortic insufficiency These complications have been observed at all ages, children are not exempt Barie attributes chronic deforming nodular rheumatism to two distinct factors The articular and the muscular lesions of chronic rheumatism may be connected with alterations in the central and peripheral nervous system, similar to the trophic lesions noted in ataxia general paralysis and certain affections of the spinal cord This conception has not been sustained by pathological anatomy as yet, but there is no doubt that chronic nodular rheumatism belongs to the group of nutritional diseases which includes gout and diabetes This assumption is the more plausible as all three have a tendency to be complicated by cardiac affections Gout is frequently accompanied by chronic degeneration of the myocardium or valvular endocarditis, while Saundby states that the heart is affected in 60 per cent of all cases of diabetes The cardiac affection is probably due to the extension of the dyscrasic process peculiar to each of these diseases to the cardiovascular apparatus The dyscrasic process of gout and diabetes are known but we are still in the dark as regards that of chronic rheumatism

Beitraege z Klinischen Chirurgie (Tubingen), April

Surgery of Tubercular Kidney O SIMON—This article summarizes the results of Czerny's experiences with thirty five cases of tuberculosis of the kidney during the last twenty one years If unilateral, it should be operated on at once he states The only exception is when the affection is merely one manifestation of miliary tuberculosis or when extreme cachexia or advanced general infection forbid intervention Nephrotomy is a palliative operation, but may be useful a preliminary to secondary nephrectomy Primary nephrectomy is the operation to be preferred but a primary nephrotomy with extirpation of the organ later, may be advisable in case the patient is very weak or the diagnosis or the condition of the other kidney is still dubious Primary extirpation of the ureter is rarely necessary Seventeen or 48 5 per cent of his 35 patients are still living and 13, or 37 1 per cent are in perfect health Five have passed through one or several pregnancies since There have been no disturbances in the urinary tract in 18 and 24 have been relieved for more than three years of all or most of their troubles Internal treatment had been tried and failed in all before surgical intervention was resorted to One patient died from hemorrhage and shock in a secondary nephrectomy, deferred too long until extensive adhesions had formed Two other deaths occurred after primary nephrectomy, both from sepsis

Injury of the Femoral Vein at Poupart's Ligament I FRAENKEL—After a traumatism in the vicinity of Poupart's ligament that suggests a possible injury of a large vessel the region should be carefully investigated even in the absence of indications of much hemorrhage In case of injury of the femoral vein the wound should be sutured, retaining the lumen intact If the edges of the wound are crushed, forceps can be applied laterally These procedures are applicable only in aseptic conditions Otherwise resection of the vein between two ligatures is the only resource Quite a large portion of the vein can be resected the openings of the afferent veins can be disregarded The rapid establishment of collateral circulation after ligature or resection of the vein is best promoted by removing the extravasated blood around the vein

stimulating the action of the heart and favoring the reflux of venous blood from the extremities by raising the foot of the bed In the thirteen published cases of suture of the femoral vein the injury occurred during an operation in all but one, and also in one of the two personal cases related by Frenkel The others were stab wounds

Ligature of the Carotid Artery in Resections of the Upper Jaw C SCHLATTER—The ligature of the external carotid artery should be permanent when done as a measure preliminary to resection of the upper jaw Hemorrhage and the danger of aspiration of blood are thereby much reduced In exceptional cases the common carotid may require ligation also but temporary constriction is better under these circumstances than a permanent ligature The details of three personal cases are given

Centralblatt f Bakteriologie (Jena), March 2

Capillary Double Lamp for Formaldehyd Disinfection PIOTROWSKI—A long necked jar is inverted on a porous plate over a spirit lamp the whole closed, except the open top of the jar above The jar is filled with a 40 per cent solution of formaldehyd The capillary attraction of the porous plate aspirates the fluid out of the jar as fast as the heat of the lamp evaporates it on the plate The gas thus generated escapes through the jar into the room and sterilizes superficially even spore material with 150 c c of the fluid to 10 cubic meters of space Ordinary microbes are destroyed with 50 c c

Centralblatt - Gynaekologie (Leipsic), April

Removal of Placenta by External Manipulations W ZANGEMEISTER—During the pauses between the labor pains, Zangemeister compresses the uterus with each finger in turn, applied from the sides, front or rear, kneading the organ as it were, and ceasing as the pains recur This massage assists materially in detaching the placenta, and should always be tried before resorting to manual extraction

Centralblatt f Harn u Sexualorgane (Berlin), April

Diagnosis of Prostatitis from the 'Swimming Drops" F SCHLAGINTWEIT—After massage of the prostate, the drops of secretion that are expelled float on the surface if caught in a glass of water, or hang suspended like long bags from the portion floating on the surface Seminal secretion becomes opaque as soon as it touches the water Pus sinks in yellowish flakes to the bottom The "swimming drops" thus enable pus, prostatic secretion and healthy seminal secretion to be macroscopically differentiated

Centralblatt f Innere Medicin (Leipsic), April 6

Guaiacol Treatment of Acute Gonorrheal Epididymitis B GOLDBERG—Lenz has reported fifty cases and Goldberg has an experience of twenty five cases of acute gonorrheal epididymitis during the last four years treated by rubbing into the parts a salve made of 5 gm of guaiacol to 10 gm each of lanolin and resorbin every twelve hours, using up the entire amount in three or four days, covering air tight after each application The patient takes 3 to 4 gm of salol during the day at the same time The general health and the local conditions remarkably improved and no inconveniences were noted in any case even in patients with much prostration cardiac insufficiency or polyarthritis The results are more favorable the earlier the treatment is commenced

April 13

Sensitive Test for Mercury in the Urine B BARDACH—About 8 gm of finely pulverized commercial egg albumin are stirred into 250 to 1000 c c of urine and the urine is rendered acid with a small amount of 30 per cent acetic acid The fluid is then boiled fifteen minutes in a water bath and filtered while hot. Hydrochloric acid—10 c c—is then mixed with the filtrate and a spiral of copper wire placed in the jar, which is then kept in boiling water for forty five minutes The wire is then rinsed and when dry is placed in a glass tube fused at one end, a few scraps of iodin are added and the tube is heated A yellowish or reddish ring appears on the glass with 5 mg of mercury to the 500 c c of urine, and even 2 5 mg are perceptible

Jahrbuch f Kinderheilkunde (Berlin), April 4

Angina Lacunaris B WESTHLIMER—Angina lacunaris must be considered an acute, infectious disease and treated and isolated accordingly The incubation lasts four days Weakly children display a tendency to frequent recurrences and complications Even healthy children are exposed to danger of the latter Ice pills and external applications of ice with insufflations of boric acid and saccharin, a fluid, cold diet and rest in bed, will usually prevent complications Children exposed should not return to school for five days

Pathology of Infantile Myxidiocy, Sporadic Cretinism or Infantile Myxedema F SIEGERT—The thyroid gland is absent in case of congenital myxidiocy The alterations in the skeleton are specific and the reverse of those observed in rhachitis, which are typical premature calcification, while in myxidiocy the ossification is defective If the tendency is arrested by thyroid treatment, rapid growth and tardy ossification follow Signs of myxidiocy are weakness of muscles, gaping fontanelles, absence of the thyroid gland, changes in the hair and an unusually small number of blood corpuscles, with a proportionate lack of hemoglobin Acquired myxidiocy may develop after rhachitis Thyroid treatment and a vegetable diet improve every case and cure recent ones Great prudence is necessary in the administration of the thyroid extract Becker has reported that a child 2½ years old took ninety tablets, of 3 each, at one time, with no disturbances Others have reported deaths after ten days of moderate treatment Siegert himself lost a patient 18 months old who had taken a tabloid of 324 after gradually increasing from quarter to half a tablet The thymus was found very large and studded with innumerable small hemorrhages He warns against thyroid treatment in rhachitis, as the status thymicus is frequent, and large doses may soften the bones

Monatshefte f Prakt Dermatologie (Hamburg), March 15

Local Treatment of Carcinoma P G UNNA—Certain cases of rodent ulcer, etc, can be arrested in the early stages by applying a resorcin plaster If some of the nodules resist this treatment, Unna applied the thermocautery, followed by resorcin in bulk or in an alcoholic solution If the neoplasm is already of deep growth, he cauterizes at once or induces ulceration with a plaster composed of 5 gm each of arsenious acid and extract cannabis indica and 20 gm salicylic acid to each meter of plaster This combination has the same elective action on cutaneous carcinoma as his simple salicylic cannabis plaster on lupus tissue The neoplastic tissue rapidly ulcerates under it while the sound skin remains intact much longer He then heals the lesion under a resorcin plaster or a resorcin benzoic acid evaporating bandage

Muenchener Medicinische Wochenschrift, May 7

Diagnosis of Tumors of the Frontal Brain HOENIGER—When a cerebral tumor begins with psychic disturbances, or when they appear in the course of its development, the assumption of a frontal tumor is justified The psychic manifestations are frequently a loquacity and tendency to joke on all subjects—"Witzelsucht," the Germans call it Hoeniger ascribes this symptom to an irritation of the motor speech center, which is located in the third left frontal convolution Patients resemble maniacs in this respect, only that the effect of the tumor is felt in the deadening of the motor excitement The corresponding region in the right hemisphere has also some action on the speech, but this "Witzelsucht" is much more frequent with tumors on the left side It is occasionally accompanied by facial paresis Another symptom is the stumbling gait, which he traces to a weakness of the muscles of the lower portion of the trunk, sometimes spasmodically contracted He describes three cases in detail, showing the localization of the tumor in the center for the rump muscles, in the middle portion of the first frontal convolution As the tumor grew and encroached on the tissues the weakness of these muscles first observed developed into permanent paralysis In proportion as the frontal tumor develops in these cases, frontal ataxia or contractions of the rump muscles or disturbances in speech become manifest as focal disturbances, and associated with these "neighborhood symptoms" appear,

proceeding from the motor region, or in case the tumor develops toward the base the symptoms proceed from the basal nerves

Phototherapy with Ultra Violet Rays GOERLT—The benefits of Finsen's complicated apparatus are obtained with a simple electrode devised by Goerlt, which concentrates the ultra violet rays for local application on lupus, and can be attached to any electric Roentgen apparatus by adding a 6 cm Leyden jar The electrode is a round metal box, in which five aluminum balls are mounted on stems in the outline of an S The spark follows the balls and never passes to the patient The box cover has a crystal top, and is fastened with elastic cords to the part in order to expel the blood as the ultra violet rays are much more effective in the absence of blood

Therapie der Gegenwart (Berlin), April

Tuberculosis of the Larynx M SCHMIDT—Congestion of one vocal cord is very suspicious of tuberculosis A week of potassium iodid will exclude syphilis The prognosis is not so grave as was formerly supposed The laryngeal process may heal even with progressing pulmonary tuberculosis No sharp, irritating foods or drinks should be allowed, and the patient should be forbidden to use his voice, even in a whisper, but should communicate entirely in writing, until cicatrization has progressed for a few weeks or months When it is found that the parts do not become congested or swollen from whispering, then the use of the voice can be gradually resumed and will prove a good exercise for the parts Schmidt uses a 50 per cent solution of lactic acid, not oftener than every one or two weeks If possible he removes all the diseased tissue by an endolaryngeal operation In advanced cases with much stenosis, tracheotomy is preferable to laryngofissure

Eucain in Spinal Analgesia—An abstract of a communication by Jedlicka from Maydl's clinic states that eucain has been used in ninety-three laparotomies or other serious operations, with extremely favorable results A corresponding amount of the cerebrospinal fluid is withdrawn, which prevents the subsequent headache sometimes noted Nausea and vomiting may occur during the period of analgesia if the stomach is empty, with possible paresis of the anal sphincter and erections This stage is followed by a normal period, but three to six hours after the injection, headache and elevation of temperature may be noticed If the headache is very severe, relief can be obtained by lumbar puncture and withdrawal of a little cerebrospinal fluid

Therapeutische Monatshefte (Berlin), April

New Operative Treatment of Flat Foot F FRANKE—A successful case of cure of flat foot is described, in which the operation consisted only of shortening the tendon of the tibialis posticus muscle, under spinal cocainization

Present Status of the Conception of Gout H ROSIN—The theory that the essence of gout is a retention of uric acid in the organism is now generally discarded It has been learned that the sources for the production of uric acid are not confined to the nuclein substances but may be derived from other albuminous elements in the food There is no proof as yet that the increased amount of uric acid in the blood serum in gout is due to more extensive destruction of nuclei It may possibly be due to an increase in the transformations of other albuminoids into uric acid instead of into urea Researches have shown that in dogs uric acid is decomposed in the liver kidneys and muscles Wiener believes that the uric acid is transformed into glycocol to a greater or less amount The uric acid in the organism is thus disposed of in the same manner as sugar The latter process is called glycolysis, and Rosin suggests the term urolysis for the former It is possible that disturbances in this urolysis may be the exclusive cause of the increase in uric acid in gout Reviewing the progress in the treatment of gout, Rosin observes that the benefits derived from piperazin in the artificial gout of fowls have not been confirmed in man Sidonal and quinic acid, however, especially the latter, have been proved to have a powerful dissolving effect on the deposits of uric acid even in the kidneys, the results in mammals surpassing those obtained in fowls No more can be expected from them, however, than from antidiabetic diet in diabetes The essence of the gouty process is not affected

Wiener Klinische Wochenschrift, May 2

Iron in Human Milk J K FRIEDJUNG—A number of tests on nineteen healthy women showed that their milk contained from 3 52 to 7 21 mg iron to the liter, an average of 5 09 mg This amount is small but constant, and is evidently important for the proper development of the infant Unfavorable external conditions, the age of the woman and chronic affections diminish the amount of iron in the milk, and even apparently healthy women whose nurslings do not thrive, are probably deficient in iron This lack of iron is possibly one of the factors in the less perfect development of bottle fed babies

Gazzetta Degli Ospedali (Milan), May 5

Etiology of Acute Articular Rheumatism N ZENDER—Two patients with an ordinary phlebitis were suddenly attacked by acute rheumatism, articular in one and restricted to the muscles in the other In the latter case the rheumatism subsided and the patient recovered as several abscesses developed in the muscles involved The first patient recovered after an extensive eruption of boils

Anales del Circulo Med Argentino (Buenos Ayres), xxiv 1 and 2

Leprosy in South America L R CONI—This article was read at the Pan American Congress held at Santiago in January It states that there are about 3000 lepers in Brazil, 800 in Argentina, 150 in Paraguay, and 43 in Uruguay, with scattered cases in the more southern countries Colombia has from 20,000 to 30 000 in a population of 4,000,000 Venezuela has two asylums housing about 300 The congress adopted resolutions to the effect that a committee be appointed by each government to collect data and study the results of systematic and scientific prophylaxis according to the precedents established by Norway An international committee was also appointed to collect statistics and report at the next congress

Nordiskt Medicinskt Arkiv (Stockholm), xxxiv, 1

Conservative Operations on the Kidney in Acute Pyelonephritis K G LENNANDER—Since 1892 Lennander has operated on five patients exhibiting symptoms of general depression, chills, fever, headache, etc, with no retention, but local pain and tenderness in the hypertrophied kidney with bacteria and pus in the fetid urine He bisected the kidney in each case and resected the portion containing the miliary abscesses and infiltration The bacterium coli was found in the resected tissues in every case The adipose capsule was congested and edematous and the fibrous capsule was detached with remarkable facility A thick layer of bloody serum was found between the kidney and the capsule in two cases All the cases were unilateral and the lesions were localized to such an extent that a large portion of the kidney was saved and resumed its natural functions All the patients were restored to health except one, in whom the renal lesion was secondary to advanced pulmonary tuberculosis An incipient tuberculosis of the kidney had probably prepared the soil for the coli infection to develop Four or five days after the apparently successful resection, hemorrhage from the kidney was followed by general sepsis and death The other kidney presented evidences of parenchymatous degeneration alone In his first patient, operated on in 1893, the portion of the kidney involved was about the size of a cherry The patient was pregnant at the time, has passed through three pregnancies since without disturbance and is still healthy The second patient developed symptoms of acute pyelonephritis and miliary abscess formation as she began to sit up after an abdominal hysterectomy for suspected carcinoma The kidney was very low and the ureter had become bent on itself The streptococcus longus was found in the resected portion of the kidney and in the omentum at the laparotomy The patient rapidly recovered The third case was a woman of 46, with a history of cystitis fourteen years before The cystitis re

curred after a violent cold, and as it improved under treatment, symptoms of acute pyelonephritis with diarrhea appeared, but no retention The patient recovered after the kidney had been split and a portion resected, but slight indications of nephritis persisted Seven months later she passed through a severe attack of pneumonia with acute hemorrhagic nephritis but rapidly gained her former comparative health The fifth case was a woman of 40 with an uretero utero vaginal fistula from her ninth childbirth from which the acute pyelonephritis and miliary abscesses developed She was cured by nephrostomy and resection supplemented later by an extra peritoneal uretero cysto neostomy Tennander's experience shows that pyelonephritis and abscess formation is frequently unilateral that a large portion of the kidney can be saved by early diagnosis and operation and that this portion will resume the natural functions of the organ

Resection of a Stricture in the Esophagus E SANDELIN —The esophagus was exposed through an incision along the inner margin of the sternomastoid muscle and the inferior thyroid vessels ligated in two places The traumatic stricture was easily removed and the stumps sutured The patient was fed at first with nutritive enemata twice a day for four days, then fluid food by the mouth It oozed through the wound a little at first In one month the patient was entirely cured eating and appearing normal A permanent sound through the mouth or nose for feeding is considered detrimental by Sandelin as it is liable to induce vomiting and irritate the wound

Chronic Pneumococcus Phlegmon I JUNDELL and I SVENSSON —A young woman became suddenly affected with a pseudomembranous non diphtheric sore throat with symptoms of severe infection As this subsided it was followed by a lesion in the sternal region resembling Quincke's acute angioneurotic edema—a chronic progressive edema or serous phlegmon finally tending to suppuration in the course of three months The pneumococcus was derived pure from the serum The fever was very high at first and the patient continued to have some temperature until the phlegmon healed after evacuation, but the general health did not suffer except during the first two days of the onset

A Case of False Stenosis of the Pylorus ISRAEL ROSENTHAL —The puzzling symptoms in the case described were explained at the autopsy by the discovery that an ulcer in the upper portion of the lesser curvature had retracted the stomach wall in such a way that the lower portion of the pyloric orifice fitted against it like a valve, as soon as the stomach became distended closing the lumen completely When the stomach was not distended the valve opened and the condition might have been easily overlooked during an operation as the pylorus was permeable for two fingers as soon as the valve fell away from the upper portion of the orifice The patient had several attacks of convulsions not long before death probably an equivalent for the tetany sometimes observed in cases of ectasia of the stomach with hyperchlorhydria —evidently a toxic phenomenon

Epidemic Cerebrospinal Meningitis in Norway C LOOFT —All the cases of epidemic cerebrospinal meningitis that have come under the observation of the district physicians are reviewed and tabulated The first cases were reported in 1815 In many instances it was impossible to discover the origin of the disease which appeared at several points at once and spread without traceable transmission some times in isolated farms Exposure to cold or fatigue were sometimes the accidental cause

Sodium Cacodylate in Tuberculosis P DE LANGENHAGEN —Four of the eight patients were in early stages of tuberculosis and all regained complete health under treatment with sodium cacodylate Three in advanced stages of tuberculosis were remarkably improved gaining 12 kilos in five months on an average

Diffuse Nephritis J W RUNEBERG —The clinical conception of diffuse nephritis or Bright's disease includes the degenerative as well as the inflammatory forms of acute and chronic generalized affections of the kidneys but not senile atrophy nor albuminuria without permanent alteration of the organ, nor congested kidney Diffuse nephritis in all its forms is due to the action of toxic substances, the result of bacterial infection or abnormal metabolism or encroaching from without These toxic substances induce extensive morbid processes of a compound inflammatory and degenerative nature, principally in the kidneys but also in the vascular system and heart Runeberg distinguishes seven clinical varieties Genuine contracted kidney or granular atrophy, amyloid fatty kidney or amyloid degeneration, simple fatty kidney, nephritis of pregnancy nephritis induced by a preceding infectious disease, nephritis of the same type as that consecutive to an infectious disease but originating in a cold or trauma, and lastly, toxic nephritis, that is, due directly to toxic substances introduced into the organism Transitional and combined forms are frequently observed In differentiating nephritic from non nephritic albuminuria the chief points are the symptoms in the vessels and heart and the formed elements in the urine in addition to the etiology and general course of the affection Indications of arteriosclerosis and of an endocarditic or myocarditic affection and the presence of cells and cylinders in the sediment of the urine speak for an inflammatory process in the kidneys But these symptoms are not observed in the entirely or predominantly degenerative forms, in which hyalin and finely granular cylinder casts are frequently found in the urine with remains of degenerated epithelium cells The cases of granular atrophy frequently simulate digestive disturbances or a nervous affection at first, or the heart symptoms or albuminuric retinitis may be the first to attract the patient's attention In other cases a severe uremic attack may be the first manifestation of trouble In all these cases the tense pulse sclerosed arterial walls, accentuated second aortic sound, loud apex beat and dilatation of the heart and displacement of the apex outward and downward, but especially the increased amount of clear urine at night and occasional slight albuminuria, suggest the diagnosis of granular atrophy Sclerosis of the arterial walls and the age are also points in its favor as it usually affects young adults, and also the low specific gravity of the urine The symptoms of uremic intoxication and of albuminuric retinitis are usually more pronounced than in arteriosclerosis without nephritis The characteristic symptoms in the vascular apparatus are absent in cases of fatty or amyloid degeneration of the kidney, but this condition is sometimes complicated by granular atrophy, and the differentiation is difficult The symptoms of hydremic anemia serve to differentiate contracted kidney The diagnosis of amyloid fatty kidney is founded on the absence of disturbances in the circulation or heart, the clear, albuminous urine free from cylinders or formed elements of an inflammatory nature on the etiology and also on symptoms of amyloid degeneration of other organs, of the spleen in particular The albuminuria is more constant in case of amyloid degeneration than in the non nephritic, so called periodical albuminuria, which disappears at night and is most pronounced in the morning The nephritis of pregnancy may lead to a secondary contracted kidney Indications of blood corpuscles, cylinder casts, and formed elements of an inflammatory nature in the urine in combination with the phenomena in the circulatory apparatus simplify the diagnosis of nephritis consecutive to a cold or infectious disease

Queries and Minor Notes

RED CROSS MEDICAL ASSOCIATION

GRAND RAPIDS MICH May 14 1901

To the Editor —Can you give me any information on The Red Cross Medical Association Is it ethical? Would a physician lower his professional standing by becoming an inspector for such an association?

C B H

ANS —As we understand it the Red Cross Medical Association here referred to is a concern gotten up to exploit the medical profession to their disadvantage a sort of bureau to furnish cheap medical advice and therefore not ethical Societies for mutual benefit are specifically not entitled to gratuitous service nor are such associations entitled to receive medical services at rates that are below what ought to be allowed and are practically gratuitous

CLIMATES FOR PULMONARY TROUBLES

NEW HAVEN, PA, May 20, 1901

To the Editor —Will you give me a list of those states east of the Rocky Mountains where the climate is not especially conducive to pulmonary troubles In other words, where persons whose lungs are sound, but who have a constitutional tendency to consumption, may live in comparative safety E P

ANS —The climates most often recommended are those of the Alleghany Mountain regions the pine woods regions of the South ern States, the Adirondacks Minnesota, etc It is impossible to say, however, just how any given case will do in any climate Probably, as Knopf says the best climate for one who fears con sumption is the one which permits him to be out doors more and longer at a time than anywhere else A pure dry air, with some elevation can be found in the regions mentioned, and it is advisable to get these if possible If a patient can recover or keep well at or near home the better and probably the cure will be more durable, not being dependent on special conditions

SECRETARIES OF STATE BOARDS

In the "Queries and Minor Notes," on p 1359, the question was asked concerning the names of the secretaries of the health boards of certain states As the inquirer evidently intended to ask the names of the secretaries of the examining boards, these were given, and in some cases they are not the same as for instance in Michi gan, where Dr B D Harison is secretary of a board entirely dis tinct from the board of health, of which Dr H B Baker is secre tary The answer should have stated that the names given were those of the secretaries of the examining boards whether they were the same as the health boards or not

New Patents

Patents of interest to Physicians, May 7 and 14

673 592 Pharmaceutical instrument George L Allen, Brad ford Pa

673 491 Apparatus for disinfecting deodorizing, or fumigating Jean Bardin Brussels, Belgium

673,675 Operating table Wm F Bernstein Philadelphia

673,598 Vein opener and clamp Carl B Dolge, Westport, Conn

673 769 Composition of matter for poultices, etc Charles M Ford Denver Colo

673 827 Atomizer Charles F Strohm, Nevada, Mo

673 630 Pad for medicinal use Frederick W Warner, Roches ter, N Y

34 475 Design, water bag Christian W Meinecke, Jersey City N J

673 872 Support for neck and head Charlotte von Hillern Flinsch Hamburg Germany

673,958 Medicine spoon Charles Langguth, Chicago

673,916 Splint clamp Edward M Lockwood, Phœnixville, Pa

The Public Service.

Army Changes

Movements of Army Medical Officers under orders from the Adjutant General s Office, Washington, D C, May 9 to 15, 1901, inclusive

William H Block, captain and assst surgeon, Vols, leave of absence granted

Charles B Byrne, lieut col, deputy surgeon general U S A, from Fort Sam Houston, Tex, to St Paul, Minn, as chief surgeon, Department of Dakota

John Carling, captain and asst surgeon, Vols, leave of absence extended

William O Cutliffe, captain and asst surgeon, Vols, leave of absence granted

Euclid B Frick, captain and asst surgeon, U S A, member of a board at San Juan, P R to examine certain persons as to their fitness for appointment as second lieutenants in the Army

William R S George, contract surgeon member of board at San Juan, P R to examine certain persons for appointment as second lieutenants in the Army

Luther B Grandy, major and surgeon Vols, recently appointed and now at Atlanta Ga to proceed to San Francisco, Cal, en route for service in the Division of the Philippines

Harry M Hallock, captain and asst surgeon, U S A, leave of absence granted

Charles F Mason, captain and asst surgeon, U S A, from Washington, D C to post duty at Fort Sam Houston, Tex

Elmer A Scherrer, contract surgeon from Fort Grant, Ariz, to Denver, Colo for annulment of contract

H Brookman Wilkinson, captain and asst surgeon, Vols recently appointed, leave of absence granted from Bishopville, S C, to San Francisco, Cal en route to Manila, P I, for duty in the Di vision of the Philippines

Navy Changes

Changes in the Medical Corps of the Navy for the week ended May 18 1901

Medical Director J C Wise, appointed a member of a Board for the physical examination of candidates for appointment to the Naval Academy

P A Surgeon W B Grove orders appointing him member of examining board at Annapolis, revoked

Surgeon O Diehl detached from the *Indiana*, and ordered to the Philadelphia Navy Yard

Surgeon C Biddle detached from the Philadelphia Navy Yard and ordered to the *Indiana*

Marine Hospital Changes

Official list of the changes of station and duties of commissioned and non commissioned officers of the U S Marine Hospital Service for the fourteen days ended May 16, 1901

Surgeon H W Austin, to proceed to Washington, D C, for special temporary duty

Surgeon R M Woodward, granted leave of absence for 10 days from May 7

P A Surgeon W G Stimpson, to proceed to Coalgate, I T for special temporary duty

Asst surgeon Taliaferro Clark granted thirty days extension of leave of absence, on account of sickness, from April 21

Asst Surgeon D E Robinson, to proceed to Port Townsend (Washington) quarantine station, and report to the medical officer in command for special temporary duty

Asst Surgeon Dunlop Moore, that portion of bureau order of April 18, 1901, directing him to proceed to San Francisco, Cal, revoked

Hospital Steward L W Ryder, granted leave of absence for fifteen days from May 6

Surgeon John Godfrey upon being relieved by Surgeon J J Kinyoun, to proceed to Wilmington, N C, and assume command of the service, relieving Surgeon T B Perry

Surgeon Eugene Wasdin to proceed to Gardner, Ill, for special temporary duty Bureau order of May 14, directing Surgeon Was din to proceed to Gardner Ill, revoked

Surgeon T B Perry upon being relieved from duty at Wilming ton, N C, to proceed to Baltimore, Md, and report to medical of ficer in command for duty and assignment to quarters

Surgeon R M Woodward, granted 10 days extension of leave of absence

P A Surgeon G B Young, granted leave of absence for two months and twenty two days from May 30

P A Surgeon W G Stimpson, to proceed to Guthrie, Okla, for special temporary duty

P A Surgeon J A Nydegger, granted leave of absence for one day

P A Surgeon J B Greene, granted leave of absence for ten days from May 15

Asst Surgeon Carroll Fox, to proceed to Sitka and Juneau Alaska, for special temporary duty

Asst Surgeon F J Thornbury, relieved from duty at Chicago and directed to proceed to Dutch Harbor, Alaska, and assume command of the service

A A Surgeon Francis Duffy, granted leave of absence for two days from May 21

A A Surgeon C F Ulrich, granted leave of absence for twelve days from May 14

Hospital Steward M R Mason relieved from duty at San Fran cisco Cal, and directed to proceed to Dutch Harbor, Alaska and report to medical officer in command for duty

Health Reports

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General U S Marine Hospital Service, during the week ending May 17, 1901

SMALLPOX—UNITED STATES AND INSULAR

Arkansas Prescott, May 8 5 cases

California San Francisco, May 4 11, 3 cases

Colorado Forty counties April 30, 430 cases

Illinois Chicago May 4 11 9 cases, Freeport, May 4 11 2 cases

Iowa Clinton, May 4 11 1 case

Kentucky Lexington May 4 11, 8 cases

Louisiana New Orleans May 4 11 10 cases

Massachusetts Boston, May 9, 1 case, New Bedford, May 14 1 case

Michigan Detroit, May 4 11, 1 case, Grand Rapids, April 29 May 11, 6 cases

Nebraska Omaha May 4 11, 18 cases

New Hampshire Manchester, May 4 11, 8 cases

New Jersey Camden, May 4 11, 1 case Newark, May 4 11, 3 cases

New York New York May 4 11, 107 cases 19 deaths

Ohio Cincinnati, May 3 10, 8 cases, Cleveland, May 4 11, 12 cases Dayton, May 4 11 1 case

Pennsylvania Philadelphia, May 4 11 3 cases Pittsburg, May 4-11 7 cases

Tennessee Memphis, May 4 11, 27 cases, 2 deaths, Nashville May 4 11, 8 cases

Washington Tacoma April 27 May 4 2 cases

West Virginia Huntington, April 13 May 11, 27 cases

Wisconsin Milwaukee May 4 11 1 case

Porto Rico Ponce, April 22 29, 3 cases

SMALLPOX—FOREIGN

China Hongkong, March 23 April 6, 22 cases 17 deaths

Colombia Panama April 29 May 6 4 cases, 1 death

France Paris April 22 27 20 deaths

Germany Bremen April 13 20 1 case

Great Britain England—Sheffield April 13 20, 1 case Scot land—Glasgow, April 26 May 3 3 deaths

India Bombay April 8 16 6 deaths, Calcutta, March 23 April 13, 339 deaths Karachi April 7 14 3 cases, 3 deaths Madras March 30 April 5 5 deaths

Italy Naples April 22 29 149 cases, 30 deaths

Russia St Petersburg, April 13 20 13 cases, 1 death

YELLOW FEVER

Cuba Havana, April 28 May 4, 1 case

CHOLERA.

India Bombay, April 8 16, 3 deaths Calcutta March 23 April 13, 194 deaths

PLAGUE

China Lam Ko district Feb 14 March 26 10,000 deaths

India Bombay, April 8 16 681 deaths Calcutta March 23 30 2557 deaths Karachi April 7 14, 229 cases 214 deaths

Japan Nagasaki, April 19, 1 case 1 death, on Japanese steam ship Taichu Maru

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Address

THE PRESIDENT'S ADDRESS

DELIVERED AT THE FIFTY SECOND ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION, HELD AT ST PAUL, MINN, JUNE 4 7, 1901

BY CHARLES A L REED, A M, M D
CINCINNATI, OHIO

In approaching the discharge of my duties as presiding officer of the fifty-second session of the AMERICAN MEDICAL ASSOCIATION, I beg to express my appreciation of the generous suffrages by which I have been called to a position of such conspicuous honor This appreciation becomes all the more pronounced when I reflect upon the magnitude and achievements of this great national body and upon the luster of the distinguished men who have presided over its deliberations This thought brings me to the first duty of the occasion, and that is, officially to bring to your attention the fact that since our last reunion three of my most illustrious predecessors have been called from their worldly activities to the realm of rewards Alfred Stille Lewis A Sayre and Hunter McGuire, each a former President of the Association, died within a single week Their lives were known of men, their records are ornaments of our annals, and their achievements are their eulogies They labored zealously and with beneficent results not alone in the scientific field, but in behalf of an organized national profession, and to guard zealously the splendid legacy which they, among others, have left us, must be one object of our labors upon this auspicious occasion The hope is indulged that steps may be taken to procure suitable portraits of these and of other deceased Presidents of the Association, to be placed in some safe gallery until such time as the Association may be able to transfer them to its own Temple of Fame I recommend that suitable formal action be taken on this occasion relative to the life, distinguished services, and the death of these lamented *confreres*

FOREIGN RELATIONS OF THE AMERICAN MEDICAL ASSOCIATION

The AMERICAN MEDICAL ASSOCIATION accredited delegates during the last year to several foreign medical conventions, notably the *International Medical Congress* at Paris, the Dominion Medical Association of Canada, the Mexican National Association and the *Pan-American* Medical Congress at Havana To each of these organizations the AMERICAN MEDICAL ASSOCIATION sustains relations of peculiar intimacy As one of the great scientific nations of the earth, the United States is naturally an integral part of the International Medical Congress This Association, by a resolution presented by your present executive officer, took the initiative in 1891, in organizing the Pan-American Medical Congress The first reunion of that Congress was held in Washington in 1893, under the presidency of the late lamented Dr William Pepper The second was held in the City of Mexico in 1896 under the presidency of Dr Carmona y Valle, while the third has been held during the last few months in the City of Havana under the distinguished presidency of Dr Juan Santos Fernandez This movement has for its object the establishment of closer relations between the medical profession of the different countries of the Western Hemisphere It has already borne excellent fruit in the increased patronage of our medical schools from the far south, in the improved status of American medical practioners in Latin America in a better understanding of quarantine questions in the different countries, and in the development of a concert in the investigation of the medicinal flora of the Western Hemisphere Our relations with the medical profession of Canada must be of increasing intimacy, and I indulge the hope that while maintaining the national limitations of our Association for delegate and legislative purposes, its membership, with the privilege of participating in all scientific matters, may be freely opened to our brethren who live beyond our immediate borders

FISCAL AFFAIRS AND THE JOURNAL

It has passed into unwritten law, born of the gradually developing features of our organization, that your President shall restrict his annual address to a discussion of the affairs of the Association and to the great object to which, by the terms of its Constitution, it stands consecrated—"the common interests of the medical profession in every part of the United States" In compliance with this rule, and realizing that I am leaving scientific questions to be presented by orators appointed for the purpose, I have pleasure in calling your attention to the satisfactory condition of the affairs of the Association, as indicated by the consolidated report of the Treasurer and of the Board of Trustees From it you will observe that under the judicious management of your Board of Trustees you had a cash balance at the end of the last fiscal year of $31,004 67, being an excess of $3,696 66 over the preceding year Your plant has been increased in value to the amount of nearly $10,000 00, and the net profits of THE JOURNAL amounted to nearly $14,000 00 You will be gratified to realize that, in addition you have safely invested as part of a fund with which to buy a home for THE JOURNAL and for the Association, the respectable sum of $25,000 00 If, however, you have occasion to feel satisfied with the normal condition of your finances, you must *contemplate with* pride the rapid increase of your Journal, in quality, size, circulation and influence The average weekly circulation grew during the last fiscal year, from 13,672 to 17,446, and I have added pleasure in informing you that, since the period covered by the

report, the weekly circulation has grown to 22,000 copies For the accomplishment of these splendid results, I feel that you will join me in hearty acknowledgment, not only of the sagacious management by the Board of Trustees but the tireless industry and the discreet direction of our accomplished editor, Dr George H Simmons

I feel that it is important, however, to call your attention to the fact that it would have been impossible for your Board of Trustees to have accomplished these results if, through its action, the Association had not become incorporated Leases were to be executed, purchases were to be made, contracts were to be entered into, money was to be loaned, and bonds were to be exacted to do all of which it was necessary that the Association should become a legally organized corporation This was effected, *ad interim*, by the action of your Board of Trustees, which procured articles of incorporation under the laws of Illinois, bearing date of April 14, 1897 I am not aware that this fact, attested by the document which I have laid before the Executive Committee, has ever been confirmed by the vote of the Association I recommend, therefore, that such action be taken at the present session

If however, the condition of the Association, and particularly of THE JOURNAL, is, on the whole, occasion for much satisfaction, certain facts revealed by the report are food for thought Thus, THE JOURNAL has an aggregate circulation two and one-half times greater than the aggregate membership of the Association It would seem, therefore, that while the profession at large prizes THE JOURNAL, it places relatively less than half as much value upon membership in the Association This fact becomes strikingly significant when it is remembered that membership can be acquired by those who are eligible at no additional expense and with but trifling inconvenience Does THE JOURNAL fulfill all the wants of the profession arising in connection with the Association? Are there no additional advantages to be derived from membership? Is there a lack of *esprit du corps*—a lack of the sense of unity in the profession? Is the existing basis of our national organization distasteful to the majority of the practitioners? Do our subscribers embrace a considerable number of practitioners who, under existing rules can not become members, and whose influence, therefore, cannot be secured in behalf of the Association? These are questions that I am at liberty to ask, and that you are at liberty to answer

Another thought suggested by the report relates to the disposition of the accumulating surplus Shall the present policy for creating a fund for the purchase of property be carried out? Shall a larger proportion of the money be expended in still further exploiting THE JOURNAL? Shall the members receive a direct advantage from the earnings of the property which they have created, by reducing the annual dues, or shall a certain proportion of our surplus be expended in conducting original scientific investigations on subjects of universal interest to the profession? I cannot resist the temptation in this connection to venture replies to these questions far enough to say that, in my opinion, a reserve should be held in hand large enough to meet any possible contingencies that might occur by fire or other disaster in connection with THE JOURNAL, that the present generous policy in promoting the welfare of THE JOURNAL should be continued, that the dues of the Association should not be decreased, and that the question of establishing and defraying the expenses of certain commissions for special scientific investigators should be taken under serious consideration The question of tuberculosis is not yet a closed chapter The causation of cancer is yet a sealed mystery The problems of tenement-house reform are not yet solved The prevention of various endemic diseases has not yet been made practicable The systematic investigation of the American medicinal flora, begun under the auspices of this Association more than forty years ago, remains an uncompleted task These are a few among the many objects of a specific character which demand and should receive the fostering care of the Association

I feel however, that at the present moment, and under the existing features of our organization it would be almost impossible to determine, judiciously, either of these very important questions, and I now bring them before the Association only for the purpose of directing attention to them, with the hope that they may be taken up subsequently and under more auspicious circumstances

SCIENTIFIC WORK OF THE ASSOCIATION

The Association began its career with general meetings devoted chiefly to questions of medical education and professional conduct, and to lengthy reports from various standing committees In 1860 it divided itself into a few sections, each with a certain autonomy, and each devoted to a particular part of our great scientific work This change was followed by the establishment of the Judicial Council, by which means controversial questions many of them of a personal character, were eliminated from the general meetings The subsequent creation of the Executive Committee still further relieved the general meetings of annoying details Thus relieved, both the general meetings and the sections have grown in scientific importance, emphasizing the persistence of our devotion to what must ever be recognized as the essential, fundamental object of our organization—the cultivation of the medical sciences It must be acknowledged, however, that great as has been the progress in this particular, too much of the time of our general sessions is yet devoted to the consideration of matters which might, with propriety, be relegated for final action to a smaller body It would redound largely to the interest of our annual session if the general membership could be entertained and instructed at our general meetings by exercises of a more purely scientific character, of such broad nature that they should not be restricted to any of the sections A reform in this particular will be a long step in the direction of progress The sections in consequence of the faithful labors of their officers, offer strikingly attractive programs for the present session In several of the lists will be found the names of invited guests who, through fortuitous circumstances, are not members of the Association, but who are, nevertheless, active workers in the scientific field, and whose participation in our labors will enrich the value of our proceedings and enhance the felicities of the occasion I bespeak for them your cordial welcome While the officers of sections and your President have exercised the prerogative of inviting guests, who come as guests and not as members of any class as specified by the Constitution such invitations have been extended solely with the object of advancing the interests of the Association I look upon this privilege, which has been exercised by all of my predecessors and by previous officers of sections, as one of extreme importance, and one which should be continued under any plan of reorganization which may be adopted It is my conviction, however that the privilege should be hedged about by certain

limitations, one of the most important of which should be that an invitation should not be extended a second time to any person residing within the United States whose professional qualifications may entitle him to membership With reference to the invitation of persons identified with the allied sciences, the matter should be left absolutely to the discretion of the President of the Association and with the officers of sections

CONGRESSIONAL AND STATE LEGISLATIVE AFFAIRS

The AMERICAN MEDICAL ASSOCIATION, during the first fifty years of its existence, exerted relatively little influence upon legislation either state or national Since the Standing Committee on National Legislation and the National Legislative Council of delegates from the state societies have been established, and have become cooperative, there is some evidence that the voice of the profession is heeded at Washington The experience of the splendid committee of the Association, acting in concert with the National Legislative Council during the last year, has, however, shown the serious necessity for more thorough organization in protecting the interests of the profession, and the interests of society as represented through the profession The inefficiency of our present organization for influence upon Congress was shown in the inability of your committee, notwithstanding its strong *personnel* and the influences at its command, to prevent the degradation of the army medical service This was accomplished by the passage of a bill under the championship of Senator Hawley, by the terms of which the medical corps of the army is subjected to unfair and humiliating discrimination This law grades the medical department for rank, promotion, and, in consequence, for pay, below every other department and special corps of the army, and, with the exception of second lieutenants it is graded below the line In accordance with its provisions, a medical officer to obtain a colonelcy, must pass through three times as many files as an officer of either the Quartermaster's, the Subsistence or the Pay departments, more than twice as many as an officer of Engineers or of Ordnance, and nearly twice as many as an officer of the Signal Corps The effect of this discrimination is not only to lower the rank and pay of medical officers, but must result in lessening the efficiency of the corps by repelling men of spirit and worth

In every war known to history the deaths from preventable diseases have exceeded those due to battle At no time has hygienic science been so resourceful as at present in preventing disease A law which fails to give to armies, either in peace or in war, the fullest protection by the application of the latest scientific developments at the hands of specially trained medical men is unjust to the soldier, to society, and to the medical profession In view of these facts the army reorganization law of the last Congress was inexplicable and inexcusable It, however, forces itself upon your consideration from another standpoint Physicians are citizens of the Republic As such they are intellectually, socially, politically and officially the equals of any other element of the body politic There is no station to which they may not attain, there is no distinction of which they may not be the recipients Their rights are of manhood origin and their perogatives are inherent They are, in very fact, peers of the realm and the peers of any peers of any realm When the status of any number of physicians in their representative relationship to society is lowered, the status of the medical profession in general is menaced in corresponding degree When the Congress, by the enactment of a law, degrades, relatively, the status of an important body of medical men, engaged in the public service, it strikes at the status of every physician in the country It becomes, therefore, the duty of every member of the medical profession, jealous of his rights, his prerogatives, and the fair name he may leave his children, to resent as personal between himself and every member of the Congress who voted for this law, the action which cast a stigma upon our profession

It has been the conviction of many enlightened members of the medical profession that the means employed by the general government for the protection and promotion of the public health are capable of improvement. These duties have devolved upon the Marine-Hospital Service which was originally designed to give succor to unfortunate people, without other domicile, who were employed upon our rivers, lakes, and the high seas With the growth of sanitary science this service, being the only established agency available by the government for this purpose, has been largely diverted from its original object As a result under the present wise administration of its Surgeon-General, its representatives are abroad investigating the sanitary condition of foreign cities, its agents are at our ports beating back threatened epidemics while valuable investigations are being conducted in its laboratories In the exercise of its quarantine functions, however, it comes in conflict with the police power that is guaranteed by the Constitution to the different states The friction thus engendered has been especially marked in the seaboard states While this is true, the Marine-Hospital Service, in scope and design, does not fulfill in highest degree the objects of a central coordinating agency for the protection of the public health It was thought to create a Department of Public Health, with its executive officer in the cabinet, but this idea yielded to that of a bureau in charge of a large Advisory Council, composed of representatives from the various states Resolutions have been adopted and memorials have been sent to the Congress, committees have been appointed money has been appropriated by this Association, bills have been introduced, and hearings have been had in committee, with the result that the conditions to-day are precisely the same that they were ten years ago, when the agitation was inaugurated in the session of this Association held at Washington

Secretary Wilson, of the Department of Agriculture, in his report for 1899, recommended that the Congress appropriate money to defray the expense of a systematic investigation of the medicinal flora of the United States, and of experiments upon the naturalization of medicinal plants indigenous to other countries This recommendation was based upon the fact that the United States is the only great country which either has not conducted or is not conducting such experiments, and upon the fact that the proposed measure, touching the avenues of industry manufacture, commerce and the public health, was one of national concern This measure, however, with its manifest importance, was denied even courteous consideration, while its friends were denied a hearing by the committees of the Congress

The cause of failure on the part of this Association to procure legislation by the Congress—and with the exception of preventing the passage of the Antivivisection bill last year and securing the enactment of the Quarantine bill this year our recent efforts must be recognized as failures—I say the causes of our failure

are properly subjects for careful consideration I have examined the records of the Association from the date of its organization, and have been profoundly impressed with the fact that memorials, resolutions, or even more definite propositions addressed to the Congress have, for the most part represented the views, or rather the impressions, of the individual members proposing them They have generally been presented in the general meeting, and have been endorsed without the deliberation essential for wise action, but a deliberation which is simply impossible in the limited time available in our general meetings In certain instances memorials to the Congress have been presented at one session of the Association, have been reported to committees and reported back for action, either at a later meeting of the same session or at the succeeding annual session of the Association But it becomes evident that this course lessens the evil but a trifle, for the reason that the committees to which such matters were referred have been constituted either under the leadership of the member proposing the measure or of members of a standing committee who had no interest in or understanding of the proposed measure Such memorials, resolutions or propositions, when acted upon affirmatively by the general meeting of the Association, have, possibly been mailed to some member of Congress or of a Legislature, but were not followed by effective work in the rank and file of the profession or among their patrons When such bills have been presented to the Congress, and have received a certain amount of support from representatives of this Association, they have, as a rule, attained only that degree of importance that have made them valuable to their ostensible champions, as something to trade in the game and barter of legislation for something which would please a larger number of constituents and command a larger number of votes In view of the fact that after all, the argument of votes is the only one which appeals effectively to the average Congressman it behooves this Association, in its efforts to conserve the interests of the profession and of society, to put itself in position to influence the largest number of votes Every physician, therefore, should, in a perfectly respectable sense, become an active working politician This subject, however, is of such breadth and of such depth that it may be well for us to pause at this juncture long enough to consider from the standpoint of fundamental facts, the relationship of physicians to each other, and of the medical profession in the aggregate as an integral factor in society

THE PROFESSION, THE ASSOCIATION AND THE COMMONWEALTH

In approaching a study, however brief, of the relation of the medical profession to the state, or, as I prefer to call it, the commonwealth, I feel that I am inviting your attention to an eminently practical theme, one which may enable us to understand the influences by which we have arrived at our present estate and the means by which we may advance to even greater achievements As we approach this theme—this eminently practical theme—we discover that the status of the medical profession, like that of every other element of that complex whole which we call society, is a perfectly natural one Whatever it may be, it has been attained in the process of evolution, and has been, and is determined, by laws as immutable as those which govern the commingling of atoms or the sidereal strides of the planets It is not the result of conventions or of resolutions or of statutory enactments, but these are to be interpreted rather as *indicia* for the time being, of the position of the profession in the body politic They are indeed, consequences rather than causes, and as such they are subjects for careful inquiry It is by a study of them that we are enabled in part to determine those laws, those natural laws, our harmony with which is essential, not alone for the present usefulness and continued progress of the profession but for the ability of the medical profession to conserve the welfare and promote the happiness of society at large

But I have said that the position of the medical profession is a natural one The truth of this declaration is apparent when we go back to the beginnings of society—when we examine the evidences presented by primitive peoples We are familiar with the classic example so frequently utilized as a starting point in the discussion of sociologic phenomena—the example of the two aborigines, one of whom makes better arrows, and the other better mats than his companion, when, presently, one confines himself to arrows, the other to mats, each trading his own for the other's product Here is an example of the beginning of what the scientists call "specialization of function in the social organism" It is an interesting process, which, based upon varying necessities and diverse aptitudes, results in multiplication of handicraft until somebody is hurt This is a new necessity, and it is met by a new aptitude and the possessor of that aptitude—the medicine man, our honored progenitor—steps upon the scene His companions, appreciating his services, reward him with their arrows and mats, and he, finding the life to his liking restricts himself to his new-found vocation—and the medical profession is established! As the necessity for his services, whether of charm or incantation, becomes more apparent the esteem of his fellows becomes more pronounced As events progress he is accorded certain rights, given certain prerogatives and hedged about by certain limitations, all calculated to increase his efficiency in promoting the common welfare—and thus is the practice of medicine regulated He is spared from the battle that he may serve his companions, and he stays away from the chase that he may delve into the great mysteries—and thus is medical education inaugurated He is the exponent, not only of his professional knowledge, but of at least the average intelligence of his people He is, in short, an integral part of the primitive social fabric As such, he shares the manners the customs, the aims, the ambitions of his companions and he, with them, is controlled by the forces which determine the common state and the common destiny His status is, therefore, determined by the very laws which control the growth and development of society itself So true is this that, from the dawn of history until the present day and in every stage of sociologic development, the civilization of a people may be infallibly determined by the intelligence the efficiency and the influence of its medical profession

THE MEDICAL PROFESSION AND SOCIETY FIFTY YEARS AGO

It would not be to our present purpose to follow the evolution of society as exemplified in any of the civilized people, or, as the scientists say, "distinct ethnic entities of the world," in which the present complexity has been attained by an orderly succession of events And it would be equally unnecessary to show, what everybody knows, that the medical profession the heritor, in common with others, of antecedent influences, has been propelled by the same forces and by equally orderly events to precisely the same standard of civilization The les

son before us is that of the relation of the medical profession to a society, which, but a few decades ago, was the most diverse in origin and the most heterogeneous in constitution known to modern history, but a society which at the dawn of the twentieth century is one of the largest, richest and most intelligent of the world a society well amalgamated and which by common consent of even adverse critics is moving in harmony with the most advanced influences of civilization I fancy I should suddenly find myself unpopular with the audience if I were to intimate that you, who comprise it—that you the representatives of the medical profession—have failed to contribute your full quota to the great progress which that society in general has achieved or that you do not reflect in intelligence and morality the highest type of civilized man I hasten to allay your apprehension for I have no such intention On the contrary I ask you to indulge with me in a retrospect of American society during the last half dozen decades that we may the better understand the important part that you, and the profession that you represent have played in the attainment of present results

As I have already stated, the middle of the nineteenth century found diverse conditions of society in the United States The older cities of the seaboard were the centers of an advanced civilization The remoter counties of the same state, however were then in the absence of railroads the telegraph and modern mail facilities more remote from the centers of American influence than is St Paul to-day from St Petersburg The great tide of emigration that had already poured and was yet pouring over the mountains and spreading in lonely habitations or widely separated communities over the vast valley of the Mississippi from the lakes to the gulf was busily engaged with the serious problem of existence The forest was to be felled and the prairie was to be subjugated habitations were to be built and crops were to be raised In the midst of these exactions, institutions of higher learning were established and to an extent patronized, and some strong men were produced But it must be recognized as true that society in general had but little time and less money to devote either to schooling or to the amenities of life The medical profession, under these circumstances, was precisely like the community of which it was a part There were but few medical colleges and they, for the most part, were but meagerly equipped Many doctors became such while going from one town to another Ignorant inventors of alleged systems of cure hawked their wares in the highways and the byways Dogmatism that was destructive to intelligence was rampant, while schism was fostered by the baneful commercialism that too generally pervaded the heterogenous mass of forty thousand people that comprised the medical profession In eight of the twenty-six then existing states no laws affecting medical practice had ever been enacted, in eleven, laws previously enacted had been repealed, in three only were there any restrictive laws and these proved inefficient, while the facts could not be ascertained relative to the remaining four states

THE ERA OF ATTEMPTED VOLUNTARY REGULATION OF MEDICAL PRACTICE

To remedy these evils, and actuated by the love of science the promptings of self-interest and by devotion to the interests of humanity, representatives of the various state medical societies met in convention over half a century ago and organized the AMERICAN MEDICAL ASSOCIATION, with the avowed object of having its members represent and take cognizance of "the common interest of the medical profession in every part of the United States" It sought to cultivate medical knowledge among its members, to elevate the standard of medical education, to promote the honor and influence and interests of the medical profession, and to enlighten the public concerning the relation between the medical profession and society Emulation and concert of action in the profession and friendly intercourse among those engaged in it were additional aims of the founders of this great body of representative American medical practitioners A constitution, by-laws and certain rules of conduct were adopted The Constitution provided for a delegate body delegates being accredited from recognized medical societies, medical schools and eleemosynary institutions The rules of conduct prescribed in detail the deportment of a physician, the deportment of the patient interdicted the licensure of sectarian physicians and proscribed from consultation those whose practice was based upon an exclusive dogma The influence of the new Association was extended chiefly through the avenues of the various state societies, many of which adopted the rules of conduct that had been prescribed by the newly formed national body as the basis of affiliation Several of the state societies, notably those of Massachusetts, Rhode Island and Mississippi, finding either that the prescribed rules of conduct were not suitable to their respective local conditions or feeling that they were sufficiently in touch with the ordinary forces of civilization to require no such formulæ, never adopted the rules of conduct prescribed by the national body The medical association of Alabama adopted the rules with rather a *naive* proviso that somebody be appointed to call attention to such of the special teachings of these rules "as may seem to require elucidation in view of special circumstances and conditions" Other state societies adopted more or less modifying resolutions, but the general spirit of ostracism and aloofness was maintained during the succeeding three decades The result of this movement was immediately salutary, it developed an *esprit du corps* in the great body of the profession, it gave an authoritative definition to medical education, and it created a strong and influential national body within the profession At the same time, however, it became apparent that the organization did not possess the necessary inherent strength to accomplish its avowed object to regulate the practice of medicine As time passed schismatic medicine grew apace, its colleges multiplied, its practitioners appeared all over the country, exemplifying that law that always makes the blood of the martyrs the seed of the church Quackery of the most flagrant character was found everywhere, and society was unprotected from its ravages while the inability of a voluntary unchartered organization to enact and to execute plenary laws was reduced to a demonstration The medical profession, as an organized body discovered that its relation to the commonwealth was, as the result of its own proscriptive policy, scarcely more intimate or more influential than at the beginning of the thirty years' hopeless experiment

THE ERA OF EFFECTIVE LEGISLATIVE CONTROL OF MEDICAL PRACTICE

The era of effective legislative control of medical practice came as the natural reaction from the demonstrated failure to accomplish the same result through voluntary organization, but it came as the result of the sentiment which had been propagated largely through the influence

of this Association The representatives of progressive medicine, turning from the National Association invoked the aid of their respective state societies in taking up the question with their respective legislatures The profession in each state, however, recognizing its own local conditions, proceeded in its own way to attend to its own business The very earliest attempts to secure state legislation revealed the fact that the so-called irregular practitioners, under the stimulus of ostracism and the fostering care of public sympathy thereby induced had become so numerous and so influential that in the majority of states nothing could be done without their cooperation It was no longer a theory, but a condition with which the real reformers were confronted—and they met it California, in 1876, through its regular medical society, took the initiative After conferences with the representatives of the sectarian societies, and after securing their cooperation, a law was procured creating a licensing board composed of representatives of both the regular and sectarian schools of practice Illinois, confronted by precisely the same condition, took precisely the same course Alabama, always progressive but the happy possessor of other conditions, was able to place the regulation of medical practice for the time being under the control of its incomparable state medical association Colorado created a mixed board New York, confronted by conditions even more complicated than those in other states took up the same task The profession of that state, acting through its organized body, containing among its members many of the most honored and illustrious names in American medicine, found it doubly necessary to enter into treaty with the denominational physicians It realized, however, that the rules of conduct to which it had always conformed contained among other provisions, one which made it unlawful to "* * * examine or sign diplomas or certificates of proficiency for, or otherwise be especially concerned with the graduation of, persons whom they have good reason to believe intend to support and practice any exclusive and irregular system of medicine'

As the thing expressly interdicted by this rule was the very thing which it was proposed to do, and which had been done in other states, and which it was very necessary to do in New York, the medical society of that state amended the rules of conduct so that it or its members might, at discretion, enter into professional relations with any or all persons whom the law of the state at that time recognized to be practitioners of medicine When this action was brought to the attention of this national body it resulted, not as might have been expected, in the amendment or the abrogation of the rule which had grown obsolete in the march of events but in its tacit reaffirmation and in the opprobrious excommunication, for the time being, of the entire profession of the great Empire State This action, viewed impartially after the lapse of nearly twenty years, becomes the more extraordinary when it is observed that similar action was never taken with regard to Massachusetts or Rhode Island or Mississippi, the societies of neither of which had ever adopted the prescribed rules of conduct, nor with regard to California or Illinois or Colorado, each of which had, by overt act, if not by open declaration, so far as this rule is concerned taken an equally non-conformist position It is not surprising that, with such an example before the state societies, the experiment in consistency has not been repeated But the movement of effective regulative legislation, once inaugurated, happily spread with great rapidity Mixed boards of licensure are now to be found in the majority of the states of the Union, and in the majority of such boards are to be found members of the AMERICAN MEDICAL ASSOCIATION engaged in issuing licenses to practitioners of exclusive dogmas, and sitting in consultation with sectarian physicians, not over a dose of medicine, but over the vastly more vital question of the qualifications of those who are to care for the sick of our Republic

THE MEDICAL PROFESSION AND SOCIETY AT THE BEGINNING OF THE TWENTIETH CENTURY

The results of the twenty-five years of statutory regulation of medical practice are in striking contrast with the results of the quarter of a century of attempted regulations by methods of proscription At the conclusion of that humiliating experiment as at the beginning of it, there was not a single effective medical practice law on the statute books of a single state of the Union To day there are forty-eight state or territorial licensing boards, the most of them being composed of representatives of both the regular and the sectarian schools of practice The laws of the different states are of varying efficiency, the one procured by the Medical Society of the State of New York, at the price of yet-maintained excommunication from this body, standing to-day as the model of excellence for the entire country Under the influence of these laws, instigated by members of the AMERICAN MEDICAL ASSOCIATION, and which, after all, are but expressions of the sentiments of the medical profession confirmed by society at large many substantial reforms have been accomplished The medical schools which, in this country, have labored bravely and efficiently under adverse conditions, have been stimulated to increased efficiency One of the first changes accomplished was the practical standardization of requirements to enter practice, and one of the first features of this standardization was to secure for the student "the aids actually furnished by anatomy, physiology, pathology and organic chemistry"—the four cardinal studies which, strange-sounding as it seems, it was necessary solemnly and specifically to insist upon a half century ago It follows, therefore, that with broadened and increasingly uniform curricula, it can not be said that schools even of sectarian antecedents entirely "reject the accumulated experience of the profession," nor can it be said that, in a sectarian sense, they any longer possess an excuse for existence Their graduates, or such of them as do not base practice on an exclusive dogma, are, in many instances, met in formal consultation by even conservative regular physicians, and, in more than one instance are made members of medical societies that are in affiliation with the AMERICAN MEDICAL ASSOCIATION

The Illinois State Medical Society, which has always been among the foremost in reform movements within the profession, at its recent annual session, unanimously

"*Resolved,* That the school of graduation shall be no bar to membership in the Illinois State Medical Society, providing such physician is recognized by the local societies as qualified and not claiming to practice any exclusive system of medicine"

The Ohio State Medical Society, by precedent if not by formal action, established the same rule

We thus see that the proscriptive rule which during the more than twenty-five years of its dominance, propagated the very evils it was intended to correct it rapidly expiring by limitation in the face of new conditions that have been induced, in spite of it by beneficent and cath-

olic legislation In the State of New York alone the annual registration of sectarian physicians has diminished nearly 90 per cent under the operation of its present laws In the State of Ohio many physicians who are graduates of sectarian schools are making application to have their classification on the register changed to "regular," while equal reactionary movements are observable in other states Thus we observe the passing of Homeopathy and Electicism just as did the calm scientists of Rome witness the passing of the "Humoralism" the "Methodism" the "Electicism," and the "Pneumatic School" of that period, and just as passed the "Chemicalism" the "Iatro-Physical School," the "Iatro-Chemical School" and the "Brunonianism" and the dozen other "isms" of later epochs, each leaving its little modicum of truth as the memento of its existence And let us felicitate ourselves that with the passing of the particular sectarianism of the last century, there is also the passing of its concomitant evils such as existed in even greater degree in the time of Galen, who "found the medical profession of his time split up into a number of sects, medical science confounded under a multitude of dogmatic systems," and, as if relating the effect of the cause, the historian continues, "the social status and the moral integrity of the physician degraded" The further results of this new order of things, however are observable, not alone in the modified curricula of the medical schools, but in the changed organic relations of the institutions themselves Under the pressure of legal requirements the weight falls with almost fatal force upon the small, private and poorly equipped institutions These institutions, in the interest of self-preservation, and to protect a respectable alumni, are forced either to expand their enterprises or to seek relations with universities which are deeply founded in the community, or else actually to go out of existence The majority of the schools seek connection with the universities, by which step alone they become logical objects for endowment, and it is to be hoped that this movement will continue until in this great country medical education shall be as firmly established as it is to-day in any of the transatlantic nations

Another of the new conditions which has developed within the last quarter of a century, as the result of an increasing professional unity, is the efficient sanitary regulations, national, state and municipal, that now afford protection to the people from diseases that were formerly devastating in their effects It is not necessary in this audience to mention smallpox, cholera, typhoid fever, diphtheria, anthrax leprosy and the bubonic plague, each of which has been brought under relatively effective control, but I do feel that it is necessary to emphasize the fact that there are many unsolved problems relating to the prevention of disease that stand as a challenge to the industry, the ingenuity and the courage of the profession While these various changes have taken place, others of almost equal importance are observable in the relations of physicians to society While the community, instigated by the medical profession, has given to that profession a legal status, definite and increasingly influential and has given it certain prerogatives and certain exemptions, it has, likewise, hedged it about with certain limitations and imposed upon it certain liabilities There are numerous laws, both common and statutory—*lex non scripta* and *lex scripta*—that admonish the physician that his conduct carries with it a liability not defined by self-imposed rules, and the numerous courts of our land proclaim that there are tribunals "other than his own conscience to adjudge penalties for carelessness or neglect" on the part of the physician So numerous, so unjust, and so disastrous are actions before such tribunals that they have caused the development of a new, legitimate and beneficent enterprise, in the development of a company to insure physicians against malpractice It may be true that in certain states and localities these laws are unjust, and that there is a grave error in their administration by judges created under our wretched elective system, but if so, the facts only emphasize anew the necessity for more complete organization of the profession and for the more active exertion of its influence upon elections

THE REORGANIZATION OF THE ASSOCIATION

This brings us again to a realization of the fact that the results that can be achieved only by the unification of our national profession can not be attained under the present organization of our Association The disproportionately rapid growth of THE JOURNAL as compared with that of the Association can have no other significance The weakness of the Committee on Legislation at Washington was a question neither of personnel or of industry, but arose purely from the fact that there was no efficient organization in the rank and file of the profession by which speedy and effective influence could be brought to bear upon members and senators Equal difficulty has been encountered in several states where organization has been similarly defective The demand for more effective organization of the Association has come from all over the country and resulted in the adoption of a motion at Atlantic City authorizing the appointment of a committee of three to report a plan of reorganization at this session Another motion was adopted authorizing the creation of a supplementary committee of one from each state and territory, entitled a Committee on Organization, which has been filled by appointing for the most part the retiring presidents of state societies for the current year The Committee on Reorganization, consisting of Dr J N McCormack, of Kentucky, Dr George H Simmons, of Illinois, and Dr P Maxwell Foshay, of Ohio has given to the important question entrusted to it a most careful and painstaking consideration It has laid before you the results of its deliberation In doing so it has emphasized the principle that this Association has its origin in the organized profession of the respective states It emphasizes the fact that the delegate body should be so small that it can remain in prolonged session and give to various subjects under consideration that deliberate attention which has not been possible under the existing scheme of organization during the last forty years It recognizes the paramount importance of the scientific feature of our work by relieving the general meetings and the sections alike of the troublesome details that now consume the limited and valuable time of the Sessions It remedies the glaring and serious defects in the present constitution It prepares the Association, by perfecting the organization, to meet important and pressing questions These considerations, together with the fact that the existing constitutional provision relative to delay of action on pending amendments has been met by the appointment, a year ago, of a committee for the avowed and published purpose of reorganization, and by the action of the committee in laying the results of its work before every member of the Association—I say these considerations, and these facts, prompt me to advise the adoption of the proposed Constitution and By-Laws in their entirety at the present annual session of the Association

The Committee on Reorganization under the restrictions of the resolution creating it, has, very properly, left undisturbed the existing rules of conduct These, if construed to have a fundamental importance, and if rigorously enforced as they now stand, would disintegrate the Association in a single day This reason and others already given, confirm me in the conviction that such rules should be either amended or abrogated, or if reaffirmed, it should be by general resolution endorsing their underlying principles but disclaiming the present applicability of their details There are, however, various views entertained upon this subject, and that the matter may be approached in a spirit of tolerance, that it may be discussed coolly and impartially that a consensus may be reached and that harmony may be attained, I recommend that the general questions of the revision of the rules of conduct be referred to a special committee on ethics, consisting of three members with instructions to report to the legislative body at the next annual session of the Association

THE NEW SCHOOL OF MEDICINE

The changes which I have advocated are essential for the attainment of the purposes of the Association and for the fulfillment of the high destiny of our National profession They are demanded by the changes that have taken place during the last fifty years The legislative functions have passed from voluntary organizations to the Congress and the legislatures, where they belong, but it still devolves upon the profession in the organized capacity to stimulate, to restrain, or otherwise to control the law-making power The responsibility of the profession is increased rather than diminished Science has come to have a clearer meaning He who now proclaims a dogma cries alone in the night, while the world sleeps They who demand a creed may read its varying terms only in the progressive revelation of natural laws Practice has changed The depletions, the gross medications, the absurd attenuations, the ridiculous antimineralism have given way to a refined pharmacy and to a more rational therapy Sacrificial surgery has yielded to the spirit of conservatism Prevention is given precedence over cure Education implies research and discovery, and all may delve I proclaim, events proclaim, the existence of a new school of medicine It is as distinct from the schools of fifty years ago as is the Christian dispensation from its Pagan antecedents It is the product of convergent influences, of diverse antecedent origin It acknowledges no distinctive title it heralds no shibboleth It is a school of human tolerance, of personal independence, of scientific honesty It is the slave of neither prejudice nor preconception, and abandons the accepted truth of yesterday, if it only be the demonstrated error of to-day It places no premium upon personal prerogative, and extends no recognition to individual authority It makes no proclamation of completeness, no pretention to sufficiency It recognizes that truth is undergoing progressive revelation not ending to-day, but continuing through the ages It yields its plaudits to achievement, and recognizes that he is the greatest among men who reveals the most of truth unto men It greets as a friend him who thinks, though he think error, for, thinking, he may think truth and thereby add to the common fund It heeds all things, examines all things judges all things

To you, the exponents of this new school, of this new generation of this new century, to you, representatives of the Democracy of Science, to you citizens of the Republic of Letters, I extend greetings, and here, in our parliament assembled, here, where our will is supreme, I this day invoke upon our deliberations the spirit of liberty, the spirit of courage, the spirit of progress, the spirit of truth

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Orations

INTERNAL MEDICINE IN THE NINETEENTH CENTURY

ANNUAL ORATION IN MEDICINE, DELIVERED AT THE FIFTY SECOND ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION, HELD AT ST PAUL, MINN, JUNE 4 7, 1901

N S DAVIS, JR, M D
CHICAGO

It is one of the duties of those who address you, as I do to-day, to review what has been newly discovered in the field of medicine or in some limited department of it At this first meeting of the AMERICAN MEDICAL ASSOCIATION in the twentieth century, it seems most natural to review what has been accomplished in the last one hundred years The time at my disposal is too brief to read to you a complete history of the achievements of this wonderful epoch, for more of genuine advancement has been made in medicine during it than during all the preceding centuries together It is only possible for me to point out some of the reasons for the rapid development of medicine, to recall to your minds some of the most important discoveries and applications of them

A century is not so long a time as we are apt to think Our grandfathers were vigorous men, in the prime of life, when the nineteenth century was born Yet changes so great that they seem miraculous have occurred since then In 1800 this great country was a wilderness, unknown even to the inhabitants of the few straggling settlements upon the Atlantic coast Our land contained no great cities There was little travel from place to place There were no steamboats nor railways, no telegraphs nor telephones Information traveled slowly by packet ship canal boat, and stage coach The discovery of the wonderful properties of the x-ray could not then have been flashed over the world in a day and its genuiness and utility confirmed within a few weeks by experiments made simultaneously in all parts of the world, as did happen at the close of the century To-day all civilized peoples are so united that knowledge has become the common property of them all In former epochs geniuses delved alone, inspired only by their own enthusiasm Often, it was many years before their discoveries became widely known or appreciated, and many more before another genius standing upon land already found ventured upon its exploration

All this has been changed Learning is not possessed by a few but by many In earlier epochs men of genius towered above their contemporaries in learning To-day thousands crowd about their shoulders, so much higher is the average of learning All scientific workers are now linked together by the rapid dissemination of news, so that no matter in what part of the world they may be, they are kept conversant with what is being thought and done in every other part and they are thereby inspired to greater mental efforts

Knowledge is no longer isolated It is cultivated in centers too numerous to count Even in this new land

universities with great libraries, finely-equipped laboratories and corps of brilliant teachers and seekers after new knowledge are found in every part of it Medical societies have been organized in every state and city, and in many counties and towns But at the beginning of the century there were only four medical schools in this country, and four state societies, organized for the advancement of medical knowledge [1]

These changes have been effected chiefly by the rapidity of communication which has been established in all civilized lands and by the greater concentration of the people in large cities

But it is not in the United States only that the population has increased and concentrated In 1801 the total population of England and Wales was less than 9,000,000 Of this number more than half lived in the country At the end of the nineteenth century the population of the same countries was more than 29 000,000 and only one-fifth of this number lived in rural districts These figures attract our attention to the social changes which have occurred in all civilized lands—changes which have effected not only a greater diffusion of knowledge but have also modified the conditions which produce and limit disease

DIAGNOSIS

At the opening of the nineteenth century "Cullen's Practice of Physic," written late in the preceding century, was the standard text-book A glance at its contents will give us the clearest conception of the state of medical knowledge at that time In an edition of this work printed in New York City in 1806 I find no description of structural diseases of the heart, even as a complication of rheumatism heart disease is not mentioned A single page is devoted to nephritis, but in its description there is no mention of the chemic and microscopic changes in the urine upon which we depend to recognize it and to distinguish its forms The affections of the respiratory organs were described with similar crudeness, under such chapter headings as "Of Catarrh," "Asthma" "Pneumonic Inflammation," "Peripneumonia Notha," and "Phthisis Pulmonalis," but the catarrhal inflammations of the nose, pharynx, trachea and bronchi were not differentiated from one another, nor were catarrhal and croupous pneumonia, brown induration, hypostatic congestion and edema of the lungs described

The speculative explanation of diseases and their causes which prevailed at that time is well illustrated by the conclusion reached by Noah Webster, who in his "History of Epidemics and Pestilential Diseases," writes that typhus and nervous fever are due to "conversion of the perspirable fluids of the body into septic matter"

Nothing will help so much to make clear the progress made in medicine in the last century as to compare the resources at the disposal of physicians of our day with those commanded by our grandparents At the opening of the nineteenth century medical men knew nothing of the clinical thermometer of percussion, auscultation, uranalysis, clinical microscopy, laryngoscopy ophthalmoscopy, of the sphygmograph, or Roentgen rays

It was not until the year 1808 that Corvisart spread widely a knowledge of percussion as a means of discovering the physical status of the viscera, although the work of Avenbrugger which he translated and which was the original description of percussion, had been published nearly fifty years before The work of Avenbrugger and Corvisart was supplemented in 1819 when Laennec published the result of his labor with the stethoscope which he invented four years earlier From this time dates our clinical knowledge of diseases of the lungs and heart

In 1827 Bright pointed out the relationship of albuminuria dropsy and diseases of the kidneys At this point clinical chemistry may be said to begin

At the beginning of the nineteenth century, compound microscopes were almost useless, for the images which their lenses made were so distorted and colored that they could not be properly interpreted In 1812 Dr William Hyde Wolleston combined two plano-convex lenses so as to correct the spherical aberration which a single double-convex lens produces, and nearly twenty years later Joseph Jackson Lister discovered the utility of combining lenses of crown and flint glass in order to produce an image in the microscope relatively free from distortions and fringes of color The more recent invention of the oil immersion lens has made bacteriology possible and has solved many of the problems of infectious diseases which puzzled even our fathers in the fifties and sixties

The dependence of medicine upon ancillary sciences is well illustrated by the sudden birth and rapid development of new branches of medical knowledge which are dependent on the perfection of the microscope

This instrument has made histology, embryology, modern pathology and bacteriology a possibility These departments of science are altogether products of the last century

It was at the beginning of the century that Bichot divided the structures of the body into what he called "tissues" and showed that there were only a few of them It is surprising that the great anatomists before him did not make the same discovery

PHYSIOLOGY

As modern anatomy has been dependent upon the microscope in order to explain structure, so physiology has been dependent upon experiments on living animals to explain function It is true that in earlier epochs at considerable intervals of time experiments upon living animals were made, notably by Harvey, when he studied the circulation of the blood but they were never made systematically until the discovery of anesthesia in the nineteenth century made them painless No wonder, therefore, that the explanations made by physiologists in 1800 seem to us extremely crude Haller, for instance, whose printed lectures formed the text-book of most students at that time thus describes the nature of blood "Hydrostatical experiments demonstrate in the blood first a kind of volatile vapor or exhalation which immediately and continually flies off from the warm juice with a sort of fetid odor coming betwixt that of sweat and urin This vapor, being catched and condensed in proper vessels appears of a watery nature joined with a small tincture of an alcaline disposition"

A few pages further on what he says of the blood gives us an idea both of the state of physiologic and pathologic knowledge at that time "For the blood in a sound healthy state, not injured by putrefaction or too violent a degree of heat is neither alcaline nor acid, but mild and gelatinous and a little saltish to the taste, yet in some diseases it is sharp enough and comes near to a state of putrefaction, as for instance in the scurvy when it corrodes through its containing vessels and in

1 The colleges were medical departments of Pennsylvania Columbia Harvard and Dartmouth (founded 1797) The societies were New Jersey (1766), Massachusetts (1781) Connecticut and New Hampshire (1791)

those who have ascites or dropsy whose waters are often much of an alcaline and corroding nature"

At the close of the eighteenth century the part which gland cells play in forming secretions was not comprehended It was believed that "the albuminous or hardening juices are separated almost everywhere from the arteries themselves, into continuous excretory canals, without any intermediate organ or machine betwixt them" It was believed that all excretions existed primarily in the blood

The physiologists of this period appreciated the importance of the lungs and the act of respiration, but their exact use they did not comprehend Haller enumerates several possible functions which they might perform, yet he did not feel sure that any one of them was the real one For instance, he says "Our blood acquires its heat principally in the lungs, for that all animals which have lungs and two ventricles in the heart have the heat of their blood commonly twice that of the atmosphere But does not this arise from the alternate extension and contraction relaxation and compression of the pulmonary vessels by which the solid parts of the blood are perpetually rubbed together and closely compressed in the attrition that is made during expiration as it is more rapidly moved and ground together during inspiration'

Our forefathers one hundred years ago often endeavored to hide their ignorance in long names and resounding phrases, a common practice, indeed, in all times and not wanting to-day, for how much ignorance will our successors find hidden in words now so commonly used as are metabolism and autointoxication

PATHOLOGY

Pathology as a distinct department of scientific medicine originated in the nineteenth century It was not until 1860 that Rudolf Virchow demonstrated conclusively his famous dictum *"Omnis cellula e cellula"* His studies of cells in disease laid the foundation and did much to rear the superstructure of cellular pathology So rapidly has a knowledge of this subject grown that we can unhesitatingly say that we now possess very accurate and detailed information as to the anatomical changes which disease effects The insight of physicians was so greatly extended into the nature of morbid processes by these pathologic studies that enthusiastic devotees of them felt that the application of the microscope to the study of disease would dispel its mysteries Increasing information, however, soon demonstrated the limitations which exist as to knowledge derivable from a study of morbid anatomy Most of us remember how, soon after the birth of bacteriology, it was also hoped that from it at last we would learn the true essence of disease But we know now that in most ailments after the bacteriologist has discovered the offending micro-organism the chemist must help us, for it is usually a product of the growth of the organism not its physical presence in the tissues that causes disease

The production of disease by parasites imbedded in the tissues of the human body was suspected from early times, but was not demonstrated until the end of the first third of the nineteenth century when James Paget, then a medical student, found unusual nodules in the muscles of a man whom he was dissecting These Richard Owen demonstrated to be the cocoon of a minute animal which he called trichina spiralis In 1847 Dr Joseph Leidy of Philadelphia found them also in pork, and soon thereafter it was shown in Germany that men could become infected by eating pork containing trichina, and that in consequence there developed in them a definite train of symptoms

In 1837 Latour in France and Schwann in Germany, almost simultaneously propounded the view that fermentation and putrefaction are due to the growth of micro-organisms Liebig, with all the weight of his authority, antagonized this belief in a "vitalistic" explanation of these phenomena Pasteur undertook to settle the dispute by methods of research, which proved to be the foundation of a new department of science—bacteriology The results of his experiments were published between 1857 and 1869 He proved that without micro-organisms there could be no fermentation, no putrefaction or decay These studies prompted many investigators to attempt to demonstrate the suspected relationship of micro-organisms to disease In 1863 Devaine succeeded in showing that the organisms, seen by him in 1850 in the blood of animals which had died of anthrax were its cause This, as some of those before me will remember, aroused a storm of controversy which was not settled finally until after my own student days

Formerly, such vague terms as "miasm,' "humor" and "virus" were used to explain the communicability of contagious diseases, but they have had to be discarded or to be newly defined by the bacteriologist

It was in the sixties that Lister made his studies upon the relationship of micro-organisms to wound infection The brilliant, revolutionary results of those studies are too well known to you to require elaboration, besides they belong to the history of nineteenth century surgery rather than to the history of internal medicine They were, however, so important in settling the relationship of invisible parasites and diseases that they must be mentioned

It was at this time, too that Pasteur and Tyndall finally settled the controversy over spontaneous generation which had raged from time immemorial The world at last felt convinced that even micro-organisms could not exist where an antecedent organism had not been

It is needless to recapitulate the long list of discoveries rapidly made from this time onward of the causes of infectious diseases, by such men as Koch, Klebs, Loeffler, Fraenkel, Laveran, and many others

HYGIENE

Although medical men have been incited to search for the causes of disease in order that they might understand their nature better and therefore be able to treat them better, such studies naturally led more directly to the prevention than to the cure of disease That is why the recent epoch-making bacteriological discoveries have greatly stimulated the study of preventive medicine It is true that the prevention of disease has engaged the attention of medical men and statesmen since the earliest times but the subject was not studied systematically before the last century

Hygiene as a separate department of medicine with a literature of its own was created only in the nineteenth century

While, in the eighteenth century, much was done to improve the hygienic state of individuals, and as a result there began before its close to be a reduction in the mortality rate, which has continued up to the present time, public hygiene or organized efforts to prevent the spread of disease by state and civic interference, was not fairly established until very recently Even to-day small

communities have no health officers or sanitary inspectors, and few regulations which are intended either to inform the people as to the relative healthfulness of towns and hamlets or by which the spread of disease is to be lessened These facts show how new and undeveloped as yet the field of public hygiene is The mortality statistics which have been gathered in cities since the middle of the last century make it possible to point out which cities are the healthiest and which diseases are the most destructive It is to be hoped that these statistics in the future will be supplemented by reports of the kinds and amount of illness, whether fatal or not that may exist in a given place

The knowledge recently acquired of infections and their spread has already been applied to their prevention Such diseases as erysipelas septicemia and tetanus no longer torment surgeons when they can make clean wounds But as late as 1870 the first of these ailments was common in the hospitals of France Puerperal fever is to-day as rare as it was common formerly Typhus fever no longer exists in America, although not uncommon at the beginning of the last century [2] Indeed, it is rarely seen in any civilized country to-day

At the beginning of the nineteenth century smallpox was so prevalent that few persons reached adult life without having had the disease, and the mortality from it in childhood was great What is the status of this disease to-day? I venture to say there are many physicians in this audience who have never seen a case, and that a majority of them have not treated more than four or five cases during their whole professional experience

In the early days of this nation's history yellow fever spread to Philadelphia and New York, and provoked much discussion, for it was feared that it would prove as great a pest as cholera A careful study of the disease and a consideration of the possibility of preventing it was referred to a committee of the New York Medical Society, which reported that yellow fever may be produced in any country by pestilential effluvia How different is this conclusion from that of recent students of the subject, who assign to it a specific cause which is transmitted from man to man by its host, mosquitoes

Cholera has been brought to our shores several times in the last few years, but its spread has been prevented in each case In Europe it has also been limited to compartively small areas Within a year the plague has been found in this country, in Great Britain, and France, but has caused little alarm, so great is the confidence that it will be successfully suppressed (Let us hope that this confidence is not misplaced)

PROGRESS IN PREVENTIVE MEDICINE

What has been accomplished during the last one hundred years by internal medicine the following statistics will show in part, although it must be remembered that mortality statistics gathered before the middle of the century are not reliable It is estimated that in 1805 in New York City from 35 to 40 deaths occurred in every 1000 inhabitants During the last decade it has averaged 20 in 1000, and has been as low as 19 in 1000 In 1847 the mortality in London from zymotic diseases was 23 26 per cent , during the last two decades 19 to 20 per cent In 1846 the deaths from consumption were 12 67 per cent , now approximately 9 per cent The mortality from diseases of the respiratory organs has been reduced in the same time from more than 12 per cent to about 7, and the mortality from diseases of the digestive organs has diminished from about 6 per cent to less than 5 In Chicago the mortality rate has fallen, with small fluctuations, from 46 and 64 deaths per 1000 inhabitants in the cholera years of 1852 and 1854 to 14 in 1898 The following diseases are among those in which the death-rate has fallen progressively Cholera infantum, croup, diarrhea diphtheria, dysentery, malaria, measles, scarlet fever and whooping cough These are ailments the spread of which has been controlled either by isolation or by insuring the people purer food and water Although the general mortality of Chicago, which is typical of the great cities of civilized countries, has improved, there are some diseases which are increasing in prevalence, notably nervous diseases heart diseases, cancer, Bright's disease, bronchitis and pneumonia To the discredit of my native city must it be said that the mortality from typhoid fever reached its highest point at the close of the century during 1890, '91 and '92 although its cause and its mode of dissemination as well as its prevention, were well known [3]

The general lowering of the death rate is due to the improved hygiene of communities In what the improvement has consisted is best shown by recalling some of the conditions under which people lived in 1800 At that time few cities had an adequate public water supply In London water could be delivered at any house three times a week by one of the water companies but most households depended upon wells The sewerage system was quite as imperfect Outhouses and cesspools were attached to each dwelling The conveyance of sewage from houses by water did not become general until well into the last century Ventilation of buildings, and especially of public halls, had attracted attention before the nineteenth century, but the real causes of danger from bad ventilation were not appreciated until bacteriology disclosed them

In 1800 streets were not paved, and rarely cleaned The habits of the people as regards eating and drinking were bestial Excessively large quantities of food were consumed by all who could provide it Alcoholic beverages were universally drunk, and generally in immoderate quantities No disgrace attached to drunkenness, and it was customary for a man to drink several bottles of wine at a sitting

Those who compose this audience appreciate how much illness must have been caused by these habits and how much the relative abstemiousness or temperance of to-day has lessened the percentage of disease

Prevention of diseases is only possible when a knowledge of their causes, their mode of dissemination, and methods for their suppression is possessed by all the people Medical men alone can not stop their spread, nor will the making of laws do it Only the intelligent cooperation of those who are ill and those who are well can accomplish it It must not be expected, therefore, that as soon as the cause of a disease is discovered, that ailment can be suppressed Time is required in which to educate all classes of people on that particular subject Unfortunately, many persons are so obtuse that they will not believe in methods of prevention even when the fullest demonstration of their success has been made A notable instance of this is seen in the recent repeal

2 Typhus forms an item in the mortality reports of Chicago (and other American cities) as late as 1886 This is probably because it was confused with typhoid Not during the first quarter and rarely afterwards genuine typhus occurred in this country

3 The more recent diversion of sewage from the water supply of that city has diminished the mortality from typhoid Unfortunately to-day very many communities are not awake to their own danger from this disease or to the possibility of its control

of laws in England which made vaccination compulsory The ease with which drinking water may be become contaminated and the danger to health from its contamination is not even now appreciated by the public It is partly because such thorough knowledge is needed by the laymen that tuberculosis, diphtheria pneumonia, typhoid fever and similar troubles have not been better controlled in the past In order that in the twentieth century the fruits of the great discoveries of the last may be gathered all members of the medical profession must fit themselves to teach their patients what is known of disease and its prevention Those who are especially adapted to do so must disseminate their knowledge by popular discourses and essays When hygiene shall be regarded by all classes as necessary and as much a matter of course as the use of the railroad, steamboat, telegraph, telephone, and labor-saving machines, then, but not until then, may striking results be expected

THERAPEUTICS

The wonderful, the revolutionary discoveries made by students of internal medicine during the nineteenth century are not always appreciated as they should be, for their results are often demonstrable only by statistics, and the dramatic rescue of individuals from certain death which the surgeon at times accomplishes, unfortunately can not be effected by the therapeutist It is not in the nature of his art Great progress, however, has been made in the use of medicines and remedial procedures Good reasons can be given for their employment, and their mode of action can be explained Empiricism no longer governs their use as it formerly did The placing of therapeutics upon a scientific basis began in the last century when the physiological effect of drugs was first demonstrated by experiments upon animals

No field of medical research needs cultivation so much or is more certain to yield a rich harvest than therapeutics It is surprising that we have not a larger volume of accurate knowledge of the effect of drugs than we do possess Of late pharmacology has been neglected for studies which have temporarily been more enticing to experimenters, such as bacteriology and experimental pathology Moreover, a knowledge of these subjects is essential to enable a clinician to apply his therapeutic resources to the mitigation of suffering, the support of strength and the elimination or destruction of noxious substances One can safely prophesy that the exact utility and the limitations of drugs and medical procedures will be defined in the present century

To accomplish this, not only is more knowledge required of the physiologic action of drugs, but also better means of accurately measuring their effects when they are given to patients We know when pain is relieved we can sometimes measure effects produced upon the heart and blood vessels and temperature, but beyond this we depend for knowledge upon the impressions of physicians, impressions which must be corrected and often reversed by a wide experience Clinicians possess only a few appliances or methods for the exact study of the sick It is to be hoped that more will be discovered, and that they will also make it possible to register with accuracy the effect of drugs When this is accomplished, undoubtedly a smaller number of useful drugs will be employed, but these with greater exactness

It is true that drugs are often used to-day when they are not needed, because patients demand them, but this will be changed when laymen learn that it is the function of a physician to teach them what to do to give nature the best chance to effect repair, what to do to make themselves comfortable and to preserve life When they learn that it is a physician's function to teach them how to protect others from the same ailment, to foretell the possibility of recovery or death and to avert or forestall complications Medical men should include time and faith in their materia medica as important means of effecting a restoration of health I do not mean faith in a fetish procured in an apothecary's shop, but faith in the wisdom, honesty and disinterested devotion of physicians which will enable them to accomplish all that can be done for the suffering

Although the greatest discoveries in the field of internal medicine have been applicable to the prevention of illness in the masses, much has also been done to increase the chances of recovery of individuals who are sick I need call attention only to a few of the improvements in treatment which have been effected to remind you of more Typhoid fever, which has been a scourge in all civilized countries, and constantly present in all larger centers of population, has not only been greatly lessened, sometimes even suppressed by improved hygiene, but the chances of recovery of the one who is sick with it have been increased several fold by improved methods of treatment Twenty-five years ago the mortality from typhoid fever in the hospitals of the world was from 20 to 35 per cent , to-day it is from 5 to 15 The better results are due to the cold baths which are used, to a more generous supply of fresh air to proper feeding, and to protection against, or the prompt treatment of, complications

One great therapeutic discovery has been made at the end of the nineteenth century—the discovery of antitoxins, the natural antidotes to the poisons of infectious agents For a very long time it had been known that something developed in the human system during the course of many ailments which gave to the sufferer from them for a variable time immunity from a recurrence of the same disease Until the existence of parasites and of poisons generated by them was proven, an antitoxin was of course unrecognizable Moreover, the possibility of such a thing in diseases, one attack of which did not cause immunity to others, was not even suspected But diphtheria antitoxin, the most efficient of those of which we know anything, is one belonging to this last group of ailments The chemical composition of antitoxins is yet to be discovered Since antitoxin has been used the mortality from diphtheria has been reduced about one-half The most extensive collection[4] of statistics gathered from all civilized countries shows that when antitoxin is used on the first day of the disease the mortality is 5 per cent, increasing rapidly to 30 per cent when used on the fourth day or later Before its employment, the average mortality of the disease was from 25 to 35 per cent To effect a still greater reduction in the death-rate from this ailment, it is necessary that it be recognized early, and that antitoxin be employed more generally as a preventive for those who have been exposed

That tetanus antitoxin and plague antitoxin are valuable is admitted Many others, such as pneumonia, typhoid tubercle, scarlet fever, erysipelas and streptococcus antitoxins are still in the experimental stage But even though it should be found that few natural antitoxins can be isolated for use as remedies, those already discovered confirm physicians in the hope that specifics will be found some day

4 Das Oesterreichen Sanitatswesen, No 52, 1900

Another therapeutic discovery made at the close of the century which has thrown a flood of light upon some obscure points in physiology and pathology and has restored to usefulness many who were formerly incapacitated and incurable is that of internal secretions, and especially the role of the secretion of the thyroid gland Ingredients in the thyroid suprarenal bodies, and ovaries produce as definite effects upon the living body as many extracts from plants or synthetic chemicals The pituitary body, the thymus and bone marrow may also have a value as yet undetermined The rescue of those suffering from myxedema and cretinism by the administration of thyroid is one of the few happy dramatic incidents which fall to the lot of the practitioner of medicine

That a much larger proportion of recoveries from tuberculosis occur to-day than formerly is evident from the statistics of this disease but this lessened mortality is not due to prevention only Trudeau has estimated that 18 per cent of all persons have tuberculous lesions, because a reaction to tuberculin can be demonstrated in that proportion This statement is confirmed by Councilman who states that his autopsy statistics show that at least 17 per cent of all who die have had this disease But in spite of this prevalence the mortality from the ailment is lessening

Rabies and tetanus are two diseases which until recently were thought to be incurable Rabies can be suppressed by killing unowned dogs and by muzzling the rest Upon this point the following statistics from England are very instructive In 1887, 217 deaths occurred in Great Britain from rabies, in 1888, 160, in 1889 312 A muzzling law was then enforced In 1891 the death-rate from the disease fell to 129, in 1892, to 38 The muzzling ordinance was repealed, with the result that in 1894, 248 deaths occurred from mad dog bites, and 672 in 1895 Again muzzling was made compulsory The death-rate once more diminished, in 1897 it was 151, in 1898 17, in 1899, 9, and in 1900, none!

Pasteur's great discovery of a method of attenuating the virus of rabies and rendering those who have been bitten by mad dogs immune by rapidly accustoming them to stronger and stronger viruses has reduced the mortality from 16 to 0 33 per cent

Tetanus, quite common in hospitals formerly, is now prevented by properly cleansing and protecting wounds It has become so rare a disease that to-day most students do not see a case of it during their college course

The nineteenth century will be known in the history of medicine as the century of experimental medicine, for it is in that field that the greatest discoveries of the age have been made The names of Pasteur, Koch and Lister will forever be linked with it as representing its greatest achievements But these achievements would not have been possible had not the physicist perfected the microscope, and had not Virchow and his pupils explored the field of cellular pathology to its farthest limits Around Virchow's name as a banner will historians gather the achievements in medicine during the early and middle portions of the century, and around Pasteur's those of its close

If our greatest needs conditioned the growth of knowledge we could prophecy what will be the great field of research of the twentieth century, but history teaches us that our needs can often not be met until some sister science has grown, or new methods of experimenting have been devised Therefore the future must remain a blank to us However we are more apt to accomplish what is needed if the problems are kept clearly in mind We greatly need more exact methods of clinical study, more accurate knowledge of the effect of remedial agents and procedures, but more than all else we need a knowledge of the changes which take place in the living tissues in health as well as in disease

The anatomist has resolved the cellular structure of the body, the physiologist, the laws which govern the action of its organs and the chemic changes which are wrought upon its surfaces, the bacteriologist has discovered the parasites that infest, and often destroy it, the pathologist has described the anatomical changes which disease produces, the clinician has linked all these facts together and has discovered ways of seeing with the intellectual eye disturbances of physiologic function, of determining their cause and of anticipating the anatomic changes which they will produce But this does not satisfy us, we want a knowledge of the atomic and molecular structure of cells of the changes which take place in the atoms and molecules in health and in disease and of the effect of medicines and remedial procedures upon them This knowledge chemistry must give us I feel sure that standing as we do at the beginning of a new century, expecting greater developments in it than in the last one we are halting before new discoveries in chemistry, waiting for new methods of studying metabolism in microscopic portions of tissue When this knowledge is vouchsafed, medicine will make another stride as great as was made when by the perfected microscope, cellular pathology and bacteriology became possible

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THE VALUE OF CLINICAL MICROSCOPY, BACTERIOLOGY AND CHEMISTRY IN SURGICAL PRACTICE

ORATION ON SURGERY BEFORE THE FIFTY-SECOND ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION, AT ST PAUL, MINN, JUNE 4-7, 1901

JOHN A WYETH M D
NEW YORK CITY

For many years, almost without exception, my predecessors in the address on surgery have devoted their labors to the exposition of some general or special subject in the domain of operative surgery, and while I would in no measure detract from the value of a thorough technical knowledge, we should not in our attention to the *art*, fall short of a proper appreciation of the *science* of surgery

The experienced surgeon soon learns that it requires more than asepsis and the rapid and skilful performance of an operation to achieve the fullest measure of success, that although a thorough practical knowledge of regional anatomy is essential in the highest degree to the conscientious fulfilment of the professional obligation, it is equally important that there be called into requisition the invaluable aid which laboratory research alone can give in determining an accurate diagnosis, in indicating the most rational measures of treatment not only in the preparation of a patient for an operation, and in the selection of the safest anesthetic, but for the post-operative management of the case, and in removing as far as possible all doubts as to the prognosis

Chemical analysis of the normal and abnormal secretions and excretions of the body *clinical microscopy* and *bacteriology* should form a part of the educational requirement of every surgeon I do not insist that the busy practitioner should attempt to master all the intricate processes of the laboratory, for this is only possible

to one who devotes years of patient labor in the fascinating department of science, but he should possess that practical knowledge of the chemistry of the body in health and disease, and of clinical microscopy and bacteriology which any diligent student, under a competent teacher, and in a properly equipped laboratory, should be able to acquire in a three months' course of study

The instances are exceptional in practice where this knowledge can not be applied with great benefit to the patient, and with satisfaction to the surgeon It is naturally of greatest value in the cases where no emergency for immediate operation exists, but its advantages are not wanting in these rarer cases, since it comes to his aid in the post-operative period

Laboratory research especially in the department of bacteriology, has placed not only the medical profession, but the entire human family under lasting obligations for the great benefits which have already been derived from its discoveries, and it may be safely said that it has done more than all else in accomplishing the revolution in surgical thought and practice which has taken place within the last two decades One of the most notable illustrations of this great advance is the triumph which has been achieved over that once fatal disease, diphtheria

The discovery by Klebs in 1883, and the isolation and cultivation in 1884 by Loeffler of the bacillus of diphtheria had its logical sequence in Behring's invaluable discovery (subsequently elaborated by Roux) that the blood of animals, especially that of the horse, rendered immune to diphtheria by inoculation, first with attenuated, and then with more virulent organisms contained a substance capable of neutralizing the effects of the bacilli or their *toxin* when simultaneously or subsequently inoculated in non-protected animals

This antitoxin serum in its dose of 10 c c of either the 600, 1000 or 1500 *immunizing units* is potent not only to arrest the destructive processes which formerly characterized this disease, but to prevent the infection of those who have been exposed to the contagion How great is the importance of the knowledge that these bacilli are not only always present in the throat of a patient suffering from diphtheria, but that they are frequently found on the nasopharyngeal surfaces and tonsils of persons free from systemic infection, and as shown by Biggs, Parke and Beebe of New York, they may remain as long as five weeks after the membrane has been discharged from infected subjects, all of which points to the necessity for the isolation of the infected individual and the careful disinfection of the throats of those who have been about diphtheria cases (McFarland)

The statistics of Professor Welch of Johns Hopkins University show that the ratio of mortality as a result of these discoveries has been reduced more than 55 per cent, and that in 115 cases, in which by reason of an early diagnosis, the treatment of serum antitoxin was begun within the first three days of the disease, the mortality was only 8 5 per cent In 546 cases in which the remedy was begun after the third day of the disease, the mortality was 27 8 per cent, the ratio of mortality increasing with fatal precision as treatment was delayed

To the surgeon, one of the most gratifying results of this great triumph of the laboratory is the fact that he is now rarely called upon to perform the operation of tracheotomy which was formerly distressingly frequent, nor to witness the sufferings associated with intubation of the larynx A professional friend in the department of diseases of children informed me recently that whereas a few years ago he had from 10 to 20 intubations of the larynx on account of diphtheria in every month, he now since the serum therapy was practiced, averaged only one or two

I believe that what is true of this disease is true of all infectious processes, and that as our knowledge expands, a safe immunizing serum will be discovered for each special toxemia Even now it would seem that this proposition is proved in other infections in which like diphtheria the pathogenic organisms are localized at the seat of infection, their toxic products alone entering the tissues through the circulation

Of this type is the spirillum or "comma" bacillus discovered by Koch in 1884 in the intestinal contents of patients suffering from Asiatic cholera These germs are not found in the deeper organs, the morbid changes in the tissues being due to their toxin Immunizing injections of cholera cultures have already been experimentally and successfully employed, and promise rich results

In this same group, bacteriologists claim a place for the diplococcus micrococcus lanceolatus of Fraenkel, the *pneumococcus* Sternberg and Pasteur isolated this germ in 1880 and in 1884 Fraenkel demonstrated it as the prevailing organism found in the sputum of croupous pneumonia Very late investigations give encouragement to the hope that serum therapy will soon be applied in the early arrest of the invasion of this most painful and fatal malady Though pneumonia is strictly a medical disease, its early recognition as a surgical complication, or in view of an anticipated operation, is of very great importance In a recent case which came under my observation at our laboratory, a specimen of sputum was sent in for bacteriological study It was not blood-stained or "brick-dust," but yellowish-white in color like the ordinary sputum of bronchitis, and was supposed to be "grippe," or tuberculosis The bacillus of tuberculosis was not present, but numerous micrococci lanceolati were discovered and the laboratory diagnosis was made and confirmed within twenty-four hours by the well-recognized symptoms of consolidation with the "brick-dust" expectoration of this disease which supervened

Tetanus toxemia, or "lock-jaw," the organism producing which was discovered by Nicolaier in 1894, and which for years has baffled the most strenuous efforts of the bacteriologist and clinician seems at last to be classified with the controlable infections Professor Osler, in the last edition of his "Practice of Medicine," says the immunizing serum of Tizzoni has been successfully and encouragingly employed in doses of 2 25 grams for the first dose, and 0 6 grams for subsequent doses Of 113 cases treated by this method 63 per cent recovered

It was not until the discovery of the bacillus of typhoid by Eberth in 1880 and the pure cultures of this germ secured by Gaffky in 1884, that there was made possible in the vast majority of cases of typhoid fever a positive diagnosis

The demonstration of Widal that when 10 drops of a twenty-four hour bouillon culture of the bacilli typhi were added and thoroughly mixed with one or two drops of serum from the blood of a typhoid patient, the bacilli lose their motility and become agglutinated in masses was one of the most brilliant advances in clinical bacteriology, and of great value in surgical diagnosis

In many of the lesions of the abdominal viscera, and especially in those located in that battle-ground of surgery, the right iliac fossa, where the physical signs and the febrile movement may suggest either beginning typhoid intestinal toxemia or a pyogenic sepsis, an early diagnosis may be determined in no other way than by the aid of the laboratory

The practitioner who has not called into requisition the invaluable aid which bacteriology affords in the differentiation of those too often obscure intraperitoneal lesions can not appreciate the satisfaction which this practical application affords How often the safety of a patient hangs upon even a few hours time and alas how often this precious time is wasted in the uncertainties of diagnosis, when a resort to the demonstration of science, available to all would have plainly indicated the proper method of procedure We know too well the fallacy of relying upon the ordinary subjective symptoms, and even some of the objective symptoms afford us no accurate clue to the pathological process which may exist The pulse and the temperature of commencing typhoid may well be mistaken for the pulse and temperature of an appendicitis The pain and muscular resistance over the right iliac and the right abdominal region are in many instances practically alike The nausea, the vomiting and the general sense of uneasiness point neither directly to the one or to the other disease, but in a crucial test by Widal's reaction with the blood count pointing to the presence or absence of a leucocytosis the question is quickly settled I have seen all the symptoms of appendicitis present in cases in which the blood count contradicted a pyogenic sepsis and in which Widal's reaction told the story of typhoid On the contrary, I have dealt with cases which ordinarily would have been most perplexing, in which all the symptoms of typhoid prevailed at a period when it was too early to recognize this disease by Widal's test, and a leucocytosis of from 15,000 to 21,000 proved at the earliest possible moment that the case was one for immediate operation [1]

The discovery by Bollinger in 1877 made the diagnosis of that comparatively rare affection actinomycosis, clear In examining the yellow granules and accompanying pus discharged from an infected area he recognized the ray fungus or actinomyces More recent researches have shown this fungus to be composed of bacilli in various stages of development, some being spores and some more perfectly developed organisms

In another fortunately rare disease, malignant pustule, caused by the lodgment in an abrasion of the bacillus anthracis, we are indebted to the laboratory for our knowledge of its etiology The anthrax bacillus discovered by Devaine in 1863 is not usually found in the blood except in the most malignant cases and in the last stages of fatal infection but they can be demonstrated in the pustule of inoculation with the microscope or by cultures

Roux and Chamberland, according to McFarland, have found that filtered cultures will produce immunity when properly introduced into animals, and we reasonably hope from these experiments that the serum treatment will before long be made applicable to infected human beings

Another rare organism is the bacillus of malignant edema, which was discovered by Pasteur in 1875 and called by him *vibrion septique* There are only two cases of this disease so far reported in man, and they were subjects of abnormally low resistance infected by the hypodermatic administration of a product of musk

The bacillus pestis or bubonic plague organism was discovered in 1894 simultaneously by Yersin and Kitasato in blood drawn from the finger tips of infected individuals, and in the broken-down lymph glands, and is described by Kitasato as greatly resembling the micro-organism of chicken cholera

Bacteriological research has robbed the puerperal state of much of the anxiety and dread which formerly attended this ordeal, not only in preventing sepsis but in recognizing the infections already established in time to prevent a general peritonitis or septicemia The puerperal uterus or this organ when the seat of non-puerperal endometritis offers an ideal field for bacterial proliferation and invasion, since septic organisms entering the cavity may rapidly penetrate the endometrium and enter the lymph channels whence they pass into the venous sinuses and lymphatics of the pelvis

Prof W R Pryor, in a paper read before the New York State Medical Association in 1900, says, "puerperal sepsis if not rapidly fatal almost always produces lesions which seriously damage the pelvic organs or the viscera," and that "time is in this serious condition an important element" He recommends the early employment of the Doderlein tube, which, after sterilization, is passed into the uterus being protected from contact until the fundus is reached From the serum and debris thus obtained cultures are made, and the character of the operation—either curettage or hysterectomy—determined by the result of bacteriological investigation

Not only does the laboratory come to our assistance in the diagnosis of certain obscure surgical lesions of the stomach, but it is still more valuable as an aid in arriving at the exact condition of the digestive functions of this organ, any derangement of which it is at times exceedingly important to correct in order to bring a patient into suitable condition to stand an operation Thus it is important to determine in certain instances whether or not free hydrochloric acid exists in this organ and while the total quantity poured into the stomach in the digestive process can not be accurately measured clinical chemistry can closely estimate the total quantity found at a given moment during digestion The acid-combining power of the proteids is known and by certain tests it is feasible to estimate

1 Two of the cases occurring in my own work within the last few months may emphasize the great value of this technique

A man of 30 was seized with quite severe pains which were confined to the region of the caecum and appendix Upon palpation there was well marked resistance in the muscles immediately over these organs which was not observed in any other part of the abdominal wall He had vomited on one or two occasions and the temperature ranged from 101 to 103 F on the second day of this attack The questions which were presented to the consultants were whether this temperature could be accounted for by intestinal toxemia by appendicitis or incipient typhoid Although it was too early in the history of a typhoid case to encourage the belief that Widal's reaction would be present this was made and with negative results On the following day the symptoms still pointing toward typoid fever a careful blood count was made and the leucocytes did not count over 7000 Assured from this that no dangerous pyogenic process was present the idea of operation even exploratory was abandoned until the examination might be repeated on the succeeding day A second careful blood count showed no leucocytosis and on the fourth day although Widal's reaction was still absent the case was declared to be typhoid and the subsequent history proved the diagnosis to be correct since a few days later the reaction of typhoid was present and the patient went through the regular stages of this fever

In a second case a male patient 45 years of age there was a typical typhoid tongue temperature ranged from 100 to 103 5 F tenderness and muscular resistance in the right iliac fossa and loose discharges from the bowels not unlike those frequently met with in typhoid Widal's reaction was tried with negative results on three successive days The blood count on the fifth day showed the leucocytes numbering 21 000 justifying a diagnosis which excluded typhoid and confirmed the suspicion of pyogenic sepsis

sufficiently close for a satisfactory diagnosis, the quantity of hydrochloric acid secreted The small quantity of hydrochloric acid which combines with ingested inorganic elements is lost to gastric digestion serving as it does its function in this process in the intestines The far greater proportion combines with the proteids in satisfactory quantity while any excess remains free in the stomach

It is clear, as stated by Van Valzah and Nisbit, that the hydrochloric acid which combines with the proteids, and that which remains free, together roughly represent the activity of acid secretion It is logical then to conclude that the quantity of hydrochloric acid loosely combined with albumin, together with the quantity remaining free in the contents withdrawn at the end of a particular time after eating a particular meal is a practical and clinical measure of the secretive activity of the peptic glands and of the digestive work of the stomach All of this is made sufficiently exact for practical purposes by the laboratory method of analysis after the simple test-breakfast of Ewald and Boas or the more elaborate test-meal as recommended by Germain-Sée [2]

The presence of lactic acid in the stomach contents as shown by Kelling's test[3] has a distinct diagnostic value since it takes place in comparatively rare conditions and since these conditions are seldom fulfilled except when carcinoma is present

Lactic acid is dependent upon the presence of a special bacillus which thrives in the stomach under abnormal conditions, and is capable of converting glucose and lactose into lactic and carbonic acid Boas goes so far as to insist that the persistent presence of lactic acid in noteworthy quantity during the digestion of a saucer of oatmeal chemically free from lactic acid is a specific sign of carcinoma of the stomach

While the stomach may under varying conditions contain hosts of various bacteria in addition to the one just considered there are only three others that are of importance as pathogenic organisms First the *sarcinæ ventriculi* (in their usual cube arrangement) which when found indicate insufficiency of the stomach muscle due to non-malignant obstruction They are not found in carcinoma since they perish in the presence of lactic acid, which, as we have just shown, is so common in malignant diseases of this organ

Another micro-organism is the *yeast plant* also found when motor insufficiency exists It may be present when the stomach contents are alkaline, neutral or acid

The *bacillus geniculatus* is present under the same conditions which produce the lactic acid organism and is considered also to be suggestive of carcinoma

When the presence of blood is suspected in the stomach and is not clearly defined by the microscope, chemistry comes to our aid in its recognition by the glacial acetic acid and ether test [4]

A study of the discharges from the rectum is as yet of little value to the surgeon Beyond the recognition of blood or pus, or cast-off cell elements in certain malignant neoplasms, there is but a single organism which is of real diagnostic value, namely, the ameba of dysentery, described by Lamb in 1859, which is a motile mass of protoplasm about 20 micromillimeters in diameter containing a single nucleus, and one or several vacuoles

In the differentiation between the pathogenic organisms of specific and non-specific urethritis, microscopy and bacteriology are our only infallible guides They teach us to eliminate the various bacteria found in the external genital and urinary passages, not bearing directly upon the etiology of urethritis, and to recognize distinctly the two forms of diplococcus, the gonococcus of Neisser, and the pseudo-diplococcus which, while not morphologically different from the specific disease-producing organism, can be readily distinguished by special modes of staining as well as by cultures In the daily routine of practice the exact nature of every suspicious urethral discharge should be subjected to careful scrutiny The patient is entitled to the satisfaction of a negative result which is easily demonstrated by staining the smear with methylene blue which clearly defines both organisms If no cocci are revealed all anxiety is put at rest, but if there are present both varieties of these organisms, occupying as they do, the protoplasm of the pus corpuscles, a further research and the differentiation of the true form from the false diplococcus is imperative The pseudo-coccus retains the violet color of the aniline-gentian water violet stain, while with careful laboratory technique the addition of the Bismarck brown brings out the gonococcus, the protoplasm of a single pus corpuscle showing at times both the blue stain of the pseudo-coccus and the diplococcus of Neisser which retains the brown color [5]

2 The simplest method is that known as the test breakfast of Ewald and Boas in which on an empty stomach, usually in the early morning, a breakfast roll which contains about 5 gm of proteids 30 gm of carbohydrates 1/3 gm of fat, 3/4 of a gm of ash and weighs 70 gm and 350 c c. of water (about a glass and a half) are taken The bread should be thoroughly chewed and insalivated before being swallowed with the water Usually in one hour s time a tube is introduced and the contents of the stomach withdrawn, usually by expression, or by siphonage and then filtered An estimate of the acidity of the filtered contents is made by using a deci normal solution of potash or soda The number of c c of this solution which will neutralize 100 c c of the filtered contents of the stomach expresses in figures the acidity of the fluid withdrawn At the end of an hour, under approximately normal conditions of digestion, the total acidity should be 50 to 60, the hydrochloric acid albumin 30 to 40, the free hydrochloric acid 10 to 20 Any departure from this rule shows the abnormal absence or excess of this important agent

The test meal of Germain See is at times preferable, since it contains a larger quantity of proteids than the test breakfast of Ewald and Boas just given but the method of procedure is practically the same The presence of hydrochloric acid can be recognized by Gunzborg s reagent which is composed of

Phloroglucin	2 gr
Vanillin	1 gr
Alcohol (absolute)	30 gr

By spreading three or four drops of this reagent in a porcelain crucible adding upon this the same quantity of the filtered contents and slowly warming the crucible after several seconds, a red color appears, and at times the red crystals of free hydrochloric acid are seen Or the simpler method of employing a filtered paper which has been soaked in a 0 5 per cent alcoholic solution of diamethylamidiazo benzol and dried This, in the presence of a trace of free hydrochloric acid turns distinctly red

3 Kelling s test consists of 5 c c of the filtrate diluted to 50 c c with distilled water, to which one or two drops of official 5 per cent solution of the perchlorid of iron are added The yellowish green tinge indicates the presence of lactic acid

4 To 10 c c of the filtered contents add 3 c c of glacial acetic acid and extract the coloring matter of the blood by shaking with 5 c c of ether This turns the ether extract brown When this discoloration does not take place there is no blood To carry the demonstration further, to the brownish decanted ether extract 10 drops of fresh tincture of guiac with a few drops of peroxid of hydrogen are added After vigorously shaking, the mixture becomes clear blue if blood is present

5 Dr Jeffreys the director of the laboratory in the New York Polyclinic employs the following differential stain

Use Gram's stain followed by a contrast stain, such as Bismarck Brown To prepare this stain proceed as follows

Prepare aniline water by emulsifying 8 drops of aniline oil in about 10 cubic centimeters of water Filter through a wet filter To this aniline water, add about one tenth its bulk of a saturated alcoholic solution of gentian violet Stain smear with this "aniline water gentian violet one or two minutes Wash in warm water and then immerse in Gram s solution for one minute The formula for this solution is as follows

Iodin	1 gram
Iodid of potash	2 grams
Water	300 c c

Thoroughly wash in 95 per cent alcohol until no more blue appears to wash out then wash in water Counterstain for one minute with a saturated solution of Bismarck brown in 3 per cent aqueous solution of carbolic acid Wash dry and mount in balsam After this treatment pseudo gonococci should be stained violet and gonococci should be brown

Bearing in mind the fact that the gonococcus of Neisser may remain dormant in these passages for months and as maintained by some observers, for years incapable of a further inoculation of the seemingly immunized patient but capable of exciting the most acute and injurious inflammation in an innocent victim it becomes a matter of the greatest importance to subject to most careful study the external genito-urinary passages where an infection has once existed It has been demonstrated that an artificial urethritis as that which nitrate of silver produces will develop the dormant gonococci and cause their presence in the discharge

Keys and Chetwood in their excellent volume on venereal diseases place well-deserved emphasis upon the value of the Gram test for recognizing these organisms They properly insist that the diplococci should be of the recognized size and have within the protoplasm of the pus corpuscle their proper shape and arrangement and remain negative to Gram s staining Even when cultures are made to demonstrate the specific organisms beyond all doubt resort should still be had to the Gram staining as a final means of identification

In cases of pyelitis many of the difficulties which formerly stood in the way of differential diagnosis betwen renal calculi, simple pyogenic pyelitis or the presence of tubercular disease in this organ are now overcome by the careful methods of the laboratory

The presence of the bacilli of tuberculosis in one or both kidneys even when they are exceedingly infrequent in the discharge, can be demonstrated in urine drawn by urethral catheterization or by the more simple process of bladder segregation when the suspected organisms are with other detritus thrown down by the centrifuge The carbol-fuchsin stain decolorized with 5 per cent sulphuric acid, brings out in brilliant red the outlines of the bacilli of tuberculosis, while the addition of 95 per cent alcohol decolorizes the smegma bacillus, and thus eliminates this possible source of error to any but the more expert laboratory workers[6]

In the effort to arrive at the general condition of a patient the chemical, microscopical and bacteriological study of the urine is only second in importance to that of the blood and when we consider the additional and exact information which can thus be obtained concerning any pathological process at any point in the urinary tract the value of this analysis is very materially increased A careful study of the urine is always indicated before determining what anesthetic it is safest to employ in the operation to be undertaken When there is no important lesion of the heart, either in its valvular mechanism or in the blood supply and nutrition of its muscular walls few surgeons, I hold would employ ether in a protracted operation in which there was any suggestion of an acute nephritis or in certain chronic forms of Bright s disease

It is commendable practice to study through several days the quantity of urine passed keeping accurate measurement as well as making a qualitative analysis of that which is passed under conditions as near as possible similar to those to which the patient had been subjected before coming under observation, and then under conditions of rest with proper alimentation and the free opening of the alimentary canal with calomel and Carlsbad salts (which agents in my experience most readily do away with fermentation and the production of gases in the bowels) to note the changes which occur in excretion

The presence of oxyluria is in my opinion a contraindication to a serious surgical operation, for the reason that it is pathognomonic of a disturbed nutrition due to insufficiency of the digestive fluids and to fermentative processes in the intestinal tract

An excess of *uric acid,* evident in the rosettes or rhombic or quadrate crystals (one-sixth objective), found in the urine *which has not been passed* more than three or four hours has also a pathological significance scarcely less than that of oxyluria It indicates a condition of defective nutrition which is part of the gouty or rheumatic diathesis, predisposes to chronic nephritis and is one of the symptoms of various acute inflammatory processes, of leukemia cirrhosis of the liver gastro-intestinal catarrh and is often present in diabetes mellitus

The chemistry and microscopy of the urine further informs us when ammoniacal decomposition of the urine is taking place within the bladder, suggesting insufficiency of this organ due to obstruction of the urethra or to atony of the bladder muscle The large rhombic masses or stellate and cross-shaped rosettes of the triple phosphates only exist in these abnormal conditions of the bladder and with the brownish colored thorn-like crystals or urate of ammonia are important aids to diagnosis

The presence of epithelia from the various portions of the urinary or genito-urinary tract, of spermatozoa and various bacteria chiefly pyogenic in character, are further and well-recognized evidence of the value of the microscope in surgical diagnosis In rarer instances the hooklets of echinococcus, the embryos of filaria and the ova of hematobium Bilharzii are thus discovered in the urine The writer has been able once to demonstrate the presence of the eggs of the last-named parasite in the bloody urine of a missionary in Africa where he had by long residence acquired the disease

From the laboratory we are taught the well-known tests for albumin and sugar by which all sources of error may be eliminated in determining not only their presence but the quantitative analyses as well The pathological conditions in which these substances are excreted are at times exceedingly grave, and it is of vital importance that their presence be discovered so that timely and judicious treatment may be instituted, or operation avoided which under such unfortunate conditions would be invariably fatal[7]

In glycosuria the surgeon must know whether he is dealing with what Pavey designates as alimentary diabetes, in which the sugar eliminated by the urine is derived solely from the food as result of defective carbo-

6 The following process is used at the Polyclinic Laboratory in determining the presence of the tubercular bacillus in the urine and feces The sediment is thrown down in the centrifuge the smear dried slowly over the Bunsen burner and stained with carbol fuchsin which is then warmed over the Bunsen burner for three or four minutes without being dried Then wash with water and decolorize with 5 per cent sulphuric acid and again wash with water After this add 95 per cent alcohol which decolorizes the smegma bacillus and again wash in water counterstain with Methylene blue and dry With the 1/12 oil immersion the clusters of tubercular bacilli are readily seen

7 To determine the presence of albumin the nitric acid and heat test is classical and reliable The simplest quantitative analysis as recommended by Hare is to fill the tube for the centrifuge to the 10 c c mark with urine to which is added 2½ c c. of potassium ferrocyanide solution (one part to ten) 1½ c.c of acetic acid is also added After mixing the fluids well the centrifuge is rotated until the albumin is precipitated Every 1/10 c c mark on the tube represents 1 per cent by bulk of albumin that is if the albumin extends up to the 3½ c c mark the albumin amounts to 35 per cent

Fehling s test in the demonstration of sugar and the quantitative analysis by means of yeast fermentation is another important laboratory process without recourse to which the surgeon in a certain group of cases can not satisfactorily work

hydrate assimilation, or whether that almost hopeless condition of composite diabetes in which abnormal disintegration is taking place, is present

No less important is the estimate of the amount of urea which is being eliminated in a given quantity of urine Employing the simple apparatus of Doremus with the sodium hypobromite solution[8] within a few minutes time, by the evolution of nitrogen gas in the presence of this, the amount of urea which is being carried off by the kidneys is readily demonstrable

Non-parasitic chyluria (that form not due to the presence of filaria) is a rare affection, but it does exist the fluid coagulating almost like jelly In these conditions the microscope shows little that is pathological excepting some minute granules and oil droplets similar to those in milk (Osler)

The presence of blood in the urine, even in the most minute quantities, can in almost all cases be recognized by the microscope, and in those exceptional instances of hemoglobinuria in which the corpuscles have disappeared, the blood crystals of Teischmann may be recognized by the addition of a drop of strong acetic acid to a few drops of urine placed upon a watch glass For this condition of blood pigment in the urine in which the blood-cells are absent, Osler suggests the name methemoglobin He further states that when granular pigment or darkly-pigmented urates or fragments of blood-disks do not point clearly to the presence of blood, the two absorption bands of oxyhemoglobin, and more commonly the three absorption bands of methemoglobin, of which the one in the red near G is characteristic, may be determined by the spectroscope In general, however, the red and white blood corpuscles and filaments of clot are clearly recognizable with the one-sixth objective Even without the microscope the presence of a very minute quantity of blood distributed through the urine can be recognized by Heller's test of adding a few c c of urine to a drop or two of strong solution of caustic soda, and boiling the mixture If blood is present a bottle-green color is produced and the phosphates fall to the bottom of the test-tube in fine flakes, tinged brownish-red by the coloring matter of the blood (Hare)

When blood is found in the urine as a complication of papilloma of the bladder, particles of the broken-down tumor are very frequently found in the urine, and under the microscope the epithelial elements of this neoplasm are easily recognized and point clearly to the source of the hemorrhage In hemorrhage from the kidney substance blood casts tell unmistakably of its source

Chemistry demonstrates in the urine the presence of indican or indoxyl sulphate of potassium, a product resulting from the decomposition of albuminous products in the intestinal tract under the influence of bacteria It is always suggestive of persistent constipation is found in obstruction of the intestinal canal, carcinoma of the liver or stomach, in peritonitis, and is one of the symptoms of pernicious anemia Urine containing this substance if treated with two or three times its volume of hydrochloric acid turns a violet color

A careful analysis of the various casts found in the urine under different conditions is of inestimable value Blood casts indicating not only hemorrhage from the kidney, but acute inflammatory conditions, and casts composed of pus corpuscles and studded with micrococci suggesting pyelonephritis, are most valuable results in laboratory research It also tells us of the existence of granular casts which indicate a chronic or subacute inflammatory process in the substance of the kidney which is accentuated when fatty casts are found, and that hyaline casts have a grave significance, as they are most frequently associated with chronic interstitial nephritis, and that the waxy variety is very common in chronic suppurative processes, usually in the bones and joints

To-day, one of the most attractive subjects of laboratory research is the blood, and although hematology is practically in its infancy, many valuable discoveries have already been made, and in the proper study of a patient a knowledge of the blood is as essential as that of the urine It may throw no light upon many cases, but the reward will be tenfold in that particular instance where the diagnosis is made definite and clear It is necessary to know the normal blood thoroughly by constant practice in order to recognize the abnormal changes which may be present in a given case, and I can think of no more useful way of spending the time not taken up by practice than by going over these important features of laboratory technique

A knowledge of hematology enables the surgeon to detect any form of anemia and to determine whether it is a type of blood impoverishment which can be corrected, or whether it is of the graver or more pernicious forms which would either preclude an operation, or if this were absolutely necessary, would enable him to anounce to those entitled to information, the gravity of the outlook In ordinary practice it is not always essential to differentiate between a pernicious anemia or a leukemia, or whether this latter condition is present in the lymphatic or splenic-myelogenous form, for the reason that all of these graver varieties call a halt to operative measures when these can be avoided But the anemia which comes from malnutrition or malaria or chlorosis, can be positively diagnosticated by a study of the blood

The richness of the hemoglobin may in a fair measure be determined by the comparative color test of the blood in proper solution, as observed through von Fleischl's hemometer When a low percentage of hemoglobin is present, it is an indication to avoid any operative shock until the impoverished condition of the blood can be corrected by proper nourishment, by rest or by medication, when this is positively indicated This also suggests the aid of the microscope in a further investigation as to the condition of the corpuscular elements of the blood It is advised by Mikulicz never to operate when the register of the hemometer shows less than 35, and it would probably be safer to place the standard ten or fifteen points higher Even in the simple forms of anemia, the degenerative changes in the blood elements especially in the red cells, are easily recognized, and are full of valuable suggestions

When the red cells are near the normal count (about 6,000,000 to the c c) they may still show certain characteristic deformities of individual cells (poikilocytosis) as well as variations in size in the presence of microcytes and macrocytes which appear in the field, and which are not seen in the normal blood If the red cells are paler in color than normal, if they undergo crena-

8 Solution A, bromin and sodium bromite each 125 grams water 1000 c c Solution B sodium hydrate 400 grams water 1000 c c. Take of A and B each one part water three parts They are only to be mixed when needed for use After the tube has been filled with the solution the pipette is filled with urine to the one c c and the point carefully introduced beyond the bend The urine in the pipette is then expelled by compression of the bulb, care being taken not to force any air into the tube

tion or breaking at the edges and do not form rouleaux it is evident that anemia is present[9] The danger signals are still further in evidence when nucleated red cells (normoblasts) appear, and when there is added to these either the giant red cells (megaloblasts) or abnormally small microblasts the condition is still more serious since these corpuscles never exist in the normal blood[10]

Hematology further enables us to differentiate with reasonable precision between chlorosis and pernicious anemia In the former though pale in color, the blood coagulates rapidly while in the latter coagulation takes place slowly and the red corpuscles do not tend to the formation of rouleaux The red cells in chlorosis (which are smaller and paler than normal and are frequently deformed) vary from 4 000 000 to 2 000 000, rarely falling as low as 1,000 000 while in pernicious anemia in which the average diameter of the red cells is increased the count rarely rises above 1 000 000 and often below this Cabot gives 1 000 000 is the average number per cubic millimeter The white cells are also diminished, varying from 4200 to as low as 500 with lymphocytosis as a prominent feature Megaloblasts are found in both conditions, but while plentiful in pernicious anemia are rarely noticed in the milder disease chlorosis The more megaloblasts in pernicious anemia the more hopeless the case

The surgeon would be extremely unfortunate to fail in the recognition of these often obscure lesions and if possible to correct them before subjecting his patient to the severe ordeal of an operation In the early recognition of septic processes—chiefly pyogenic—surgery can no longer disregard the value of the blood count, especially the estimation of the leucocytes

The relative number of leucocytes in a given quantity of blood, or their proportion to the red corpuscles can be readily determined by the use of the Thoma-Zeiss apparatus which is as well known, consists of two pipettes, one for the red and one for the white, with a well-outlined and peculiarly constructed slide or counting apparatus, and employed with the ordinary one-sixth laboratory objective The differentiation by the use of the Daland hematocrit is not considered sufficiently exact to be satisfactory in the hands of the majority of hematologists It is essential in making these differentiations to bear in mind the normal conditions that at the sea level the average number of red cells per cubic millimeter is 5,000 000 in men, and 4,500 000 in women and 6,000,000 in the young and more vigorous adults, while the white cells average about 7500 per cubic millimeter for each sex

Certain conditions not considered normal influence the number of leucocytes since in the latter months of pregnancy they are moderately increased, and after parturition, and during the early weeks of lactation a leucocytosis may be present without pathological significance After hemorrhage the leucocyte count is increased, and in diphtheria erysipelas trichiniasis all extensive forms of endometritis and all acute pyogenic processes, leucocytosis exists except in those cases where the vitality of the individual has been overwhelmed by the severity of the septic process under which condition the leucocytes no longer respond to the demand for the protection of the tissues, and are not present in the superficial blood in even normal proportions It is probable that the application of this knowledge is more profitable at present in a study of the various lesions of the abdominal and thoracic organs We know that in a certain proportion of cases of infection, temperature does not always indicate the increasing gravity of the lesion while the degree of sepsis can be in great measure determined by the leucocyte count In impaction of feces, extrauterine pregnancy, floating kidney, gall-stone colic, renal colic ovarian neuralgia, intussusception, volvulus, internal hernia twisted pedicle, etc, there is no leucocytosis unless complicated with an acute septic process In abscess of the liver the leucocyte count ranges from 12,000 to 48,000, while there is a well-marked increase in all the septic pyogenic processes of the lungs and the pleura

In osteomyelitis the leucocyte count ranges as a rule from 15,000 to 25,000 and at times higher Since in the early stages of this disease it is at times difficult by subjective symptoms to differentiate between rheumatism or gout, the leucocyte count is invaluable in demonstrating at once the pyogenic process

In that very rare disease, trichiniasis, the leucocytes register sometimes as high as 30,000, but the special feature is the presence of a large number of eosinophile cells sometimes as high as 50 per cent and in rare cases 67 per cent of the total number of leucocytes being this form of corpuscle A very considerable number of cases have been reported within the last year in which the diagnosis had been determined by the presence of eosinophiles

Not only can the presence of the plasmodium malariæ be recognized in the red blood cells, but hematology is already able to determine between the different varieties of the malarial parasite It has been shown that the tertian organism takes forty-eight hours to develop and undergo sporulation, the quartan seventy-two, while the estivo-autumnal passes through irregular phases, varying from forty-eight hours to several days

We are enabled to demonstrate also the presence of the spirochete of relapsing fever discovered by Obermeier in 1873 Although the cork-screw or spiral threads are rarely seen unless the blood is examined in the height of the fever paroxysm, diplococcus-shaped bodies believed to be the spores of this organism are found in the periods of remission

The time allotted has permitted hardly more than a suggestion of the methods of laboratory research, applicable in the daily routine of surgical practice To me the moral of the lesson is that the *science* and *art* of surgery are inseparable

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THE PROGRESS AND TENDENCY OF HYGIENE AND SANITARY SCIENCE IN THE NINETEENTH CENTURY

ORATION ON STATE MEDICINE BEFORE THE FIFTY-SECOND ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION, AT ST PAUL, MINN, JUNE 4-7 1901

GEORGE M KOBER M D
PROFESSOR OF HYGIENE GEORGETOWN UNIVERSITY
WASHINGTON, D C

Hygiene is a department of medicine whose object is the preservation and promotion of health and deals, therefore with all the factors likely to influence our physical welfare It is not an independent science, but rather the application of the teachings of physiology,

[9] The average red corpuscle (normal) is seven micro milli meters in diameter

[10] A normoblast is a nucleated red cell not over 10 mm in diameter with a nucleus not more than one half the diameter of the same

chemistry physics, meteorology, pathology, sociology, epidemiology and bacteriology to the maintenance of the health and life of individuals and communities The subject is very properly divided into personal and public hygiene In the former the doctrines are applied to individuals in the latter to communities and states

This branch of medicine has received such an impetus within the last few decades that many persons regard it of modern origin, such, however, is not the case, for on turning to early history we almost invariably find that the health of the population has been made a subject of legislation Hygiene was practiced by the Egyptians the old Indians and Hebrews, and a study of the habits of the primitive peoples shows that a desire to prevent disease is innate to all men

The Greeks and Romans paid special attention to the physical culture of their youth, they also paid much attention to the water-supply and Athens was provided with sewers at an early period of her history

The teachings of Hippocrates 400 B C doubtless bore many fruits, and whether it is true or not as stated by Galen, that he ordered, during a pestilence at Athens, aromatic fumigation and large fires in the streets we have at least his writings on air, water, soil, habitations and occupations and his views of local and seasonal influences on sporadic and epidemic diseases In Homer s "Odyssey" reference is made to Ulysses purifying his house with burning sulphur and Aristotle in his "Politica," shows his sanitary acumen when he says "The greatest influence upon health is exerted by those things which we most freely and frequently require for our existence and this is especially true of water and air"

The Romans amidst their military operations found time to construct the "Cloaca maxima" about 2400 years ago, which not only served for the removal of refuse but also helped to drain many of the marshes and constitutes the principal sewer of modern Rome Aqueducts were made to cover miles upon miles of the surrounding plains, and their splendid ruins many of which have been restored and are now used for their original purpose attest the munificence and abundance with which the first of sanitary requisites was supplied to the Eternal City It is stated that between 400 B C and 180 A D about 800 public baths were established, among them the "Thermæ Caracallæ" which alone would accommodate 3000 bathers at one time

During the reign of the Cæsars attempts were made to drain the Pontine Marshes, sanitary officials and physicians to the poor were appointed and homes for poor girls and orphans were established In the meantime the true spirit of Christianity asserted itself and we read of the establishment of hospitals as early as the fourth century, these were speedily followed by infant and orphan asylums and homes for the poor and incurables During the Middle Ages sanitation received a decided check, ignorant and brutal prejudices appear to have been the ruling spirits and for many reasons it was the most insanitary era in history

PESTS AND INSANITARY CONDITIONS OF THE MIDDLE AGES

About this time most of the towns in Europe were built in a compact form surrounded with walls the streets were narrow and often winding for defensive purposes, shutting out light and air from the houses The accumulation of filth was simply frightful Stables and houses were close neighbors human filth was thrown on the streets or manure heap The dead were buried within the churchyards Sewers and aqueducts having been permitted to fall into disuse, the inhabitants were compelled to resort to wells with polluted subsoil water All the conditions were favorable for the spread of infectious diseases and in the Fourteenth Century alone the Oriental or bubonic plague according to Hecker, carried off one-quarter of the population of Europe, or over twenty-five million victims

Although this disease had been described as early as the third century, B C, a lamentable state of ignorance is shown when we remember that the majority of people regarded the plague as the dispensation of God's providence, an evidence of divine wrath, which they hoped to allay by all sorts of self-inflicted punishments, and the passion plays of Oberammergau and elsewhere originated about this time Others accused the Jews of being the cause, and hundreds were burned at the stake until Pope Urban IV placed them under his special protection The Faculty of Paris attributed the epidemic to the conjunction of planets on a certain day in 1345, and the Faculty of Leipzig with equal gravity, asserted that it was connected with earthquakes, unseen waves of air, inundations, etc Venice, alone of all Europe took a sensible view of the matter, and for the first time in history, in 1348, appointed three guardians of public health and the rules adopted later to isolate infected houses and districts for forty days has given rise to the term quarantine—from *quaranta giorni*

The repeated invasion of the Oriental pest appears to have everywhere compelled some sanitary efforts and an imperial decree in 1426 required the appointment of city physicians throughout Germany, whose duty it was to adopt preventive measures A city ordinance of Nurnberg in 1562 gives detailed directions as to the quality of bread, beer and wine offered for sale, the cleaning of streets and houses, the disposition of infected clothing and bedding the fumigation with sulphur and straw of pest-houses, etc

In 1685 Prussia established a central medical bureau, and appointments of health officers and privy medical counsellors were made, whose duties consisted in advising the men entrusted with the care of the government on matters relating to public health, and some of these titles are still in vogue in Europe At the beginning of the eighteenth century Prussia, upon being threatened with an invasion of the bubonic plague from Austria, created the "Collegium Sanitatis," popularly called the "Pest College," which was really the beginning of the present state board of health In 1762 a sanitary council was established in every Prussian province for the prevention of disease among man and animals About the same time sanitary improvements in the way of widening streets for the purpose of supplying more air and light to the habitations, and better methods for the collection and removal of the wastes of human life were introduced but, broadly speaking at the close of the seventeenth century the habits of the people in Europe were generally filthy and in striking contrast to those observed among the most untutored savages of the present day

In Madrid we are told by Barcome in his history of epidemics, "that not even a privy existed in 1760 It was customary to throw the ordure out of the windows at night and it was removed by scavengers the next day An ordinance having been issued by the king that every householder should build a privy, the people violently opposed it as an arbitrary proceeding, and the physicians remonstrated against it, alleging that the filth

absorbed the unwholesome particles of the air which otherwise would be taken into the human body His majesty however, with commendable zeal, persisted but many of his citizens, in order to keep their food wholesome, erected privies close to their kitchen fireplaces'

With such unsanitary conditions we need scarcely be surprised that the mortality in towns was greater than their birth-rate and that the city population had to be recruited continually from the country Toward the close of the eighteenth century many sanitary reforms were effected, however, especially in connection with infant and orphan asylums, and the management of schools and prisons Of special importance is the brilliant discovery, or re-discovery of vaccination by Jenner in 1796

PROGRESS OF SANITATION IN THE NINETEENTH CENTURY

The nineteenth century can boast of many advances in hygiene, particularly since the European invasion of cholera in 1830 The English towns which had been visited by this disease and those fearing similar scourges were willing to profit by their sad experience, and freely instituted sanitary reforms in the establishment of sewers, public water supplies, sanitary homes, etc

The example of England was followed by all civilized nations, with similar results The efforts of sanitation, as taught by Dr Parkes, were demonstrated during the Crimean War and as beautifully expressed by Virchow during our Civil War, reached "the highest point in humane efforts ever attained in a great war," and we may proudly add have even been excelled during our late Spanish-American War

PROGRESS OF SANITATION IN THE UNITED STATES

While the people of the United States were not slow in adopting and originating sanitary measures of great value, our ideas of personal liberty, guaranteed to us by the Constitution, evidently prevented early legislation in matters of public health, for fear that such legislation might affect the personal habits of the citizen and lessen his freedom of action Dr Samuel W Abbott, in his masterly exposition of "The Past and Present Condition of Public Hygiene and State Medicine in the United States," records, however the gratifying fact that the early colonists recognized the need of preserving their records, which constitute the foundation stone of public hygiene, by enacting a law in 1639 "that there be records kept of the days of every marriage, birth and death of every person in this jurisdiction"

The importance of vital statistics is not fully appreciated at the present day, and yet, as remarked by Dr Billings, "when we wish to study the healthfulness of a city, whether it is getting better or worse or judge correctly the effect of certain sanitary laws, we should not only know the number of deaths, but also the amount and character of the prevalent disease, together with accurate information as to the number of population at different ages" It is a matter of regret, therefore, that even now only ten states, Connecticut, Delaware, Maine Massachusetts Michigan, New Hampshire, New Jersey, New York, Rhode Island and Vermont have anything like a satisfactory system of vital statistics

According to Abbott "Up to the close of the eighteenth century and for several decades of the nineteenth, almost the only health legislation which was enacted in the different states in the Union consisted in a few laws relating to smallpox, since this pestilence was scarcely ever absent for many years at a time from any city or village, 'till after the general introduction of vaccination"

Dr Waterhouse, of Cambridge, having secured a supply of vaccin lymph from Dr Jenner introduced vaccination in Boston in 1800, and Dr Seaman in New York in 1801 In the same year President Jefferson received some virus from Dr Waterhouse and was vaccinated by Dr Grant, of Georgetown

The invasion of cholera from Canada in 1832, and the epidemic of 1848-1849 here, as in Europe, aroused public interest in sanitary reforms, and the legislature of Massachusetts in 1849 appointed a commission to make a sanitary survey of the state, and we are told by Dr Abbott "that this was done none too soon, for in that year the general sanitary condition of the state, as shown by the report of the commission was deplorable and the death-rate unusually high Only a few towns had then introduced public water-supplies Cholera was beginning to appear again and dysentery and other infectious diseases were more destructive than they had been for many years"

HEALTH BOARDS

New Orleans having lost 8000 victims of cholera in 1832, out of a population of about 55,000, and anxious to maintain a quarantine, secured the enactment of a law in 1855 for the establishment of a state board of health, in 1869 a more comprehensive board was established in Massachusetts, followed in 1870 by California, since which time nearly all of the states and territories—forty-two in number—have followed the example *Pari passu* and in many instances preceding the establishment of state boards of health, sprung into existence our local boards of health, who adopted measures for the control and restriction of infectious diseases, for the abatement of local nuisances for the sanitary inspection of the food-supply, schools, public buildings and institutions and tenements, street cleaning and removal of refuse, registration of vital statistics, supervision of burials and of municipal water-supply, sewerage, and sewage disposal, care of bathing establishments, regulation of offensive trades, etc

EFFECTS OF VOLUNTARY ORGANIZATION ON SANITATION

In September, 1872, the American Public Health Association was organized, in 1873 the Section on State Medicine of the AMERICAN MEDICAL ASSOCIATION was created, since then the American Climatological Association, the Sanitary Council of the Mississippi Valley, the American Sanitary Association, and the American Health Resort Association have been organized, and numbering, as they do, among their members some of the best minds in the profession, much good has been accomplished by these bodies, and the so-called "sanitary conventions" in molding public opinion and in framing and recommending health laws There is no doubt, however, that all these organizations were stimulated into existence by the lofty tenets of our Code of Ethics,[1] in which the duties of the profession to the public were prescribed as early as 1847

1 Article 1 paragraph 1 reads As good Citizens it is the duty of physicians to be ever vigilant for the welfare of the community and to bear their part in sustaining its institutions and burdens they should also be ever ready to give counsel to the public in relation to matters especially appertaining to their profession as on subjects of medical police public hygiene and legal medicine It is their province to enlighten the public in regard to quarantine regulations the location arrangement and dietaries of hospitals asylums schools prisons and similar institutions in relation to the medical police of towns as drainage ventilation etc and in regard to measures for the prevention of epidemic and contagious diseases and when pestilence prevails it is their duty to face the danger and to continue their labors for the alleviation of the suffering even at the jeopardy of their own lives

Indeed, the AMERICAN MEDICAL ASSOCIATION, according to Dr N S Davis, Sr, gave prominent attention to State Medicine and sanitation from its first meetings At the second annual meeting, in 1849, standing committees were appointed on forensic medicine and on hygiene and reported annually on these topics and on meteorology, medical topography and epidemic diseases until 1860, when work in Sections was commenced Dr A N Bell, of New York, delivered the first address on State Medicine in general session of the ASSOCIATION in 1874, followed in 1875 by Dr N I Bowditch, of Boston [2] In this connection, I may say that there is need of reliable information on the geographical distribution of diseases like goiter, cretinism, etc, and county medical societies would contribute much to the common fund of knowledge by placing on record information of this character

NATIONAL BOARD OF HEALTH

The cholera epidemic of 1872 and 1873 resulted in the appointment of a commission by Congress This, together with the yellow fever epidemic of 1878 in the Southern States, affecting, according to Sternberg, over 74,000 persons, with 16,000 deaths, called attention to the necessity of some central sanitary organization In March, 1878, Congress created a national board of health, whose duty it was to make investigations into the causes and means of prevention of contagious and infectious diseases, to indicate measures of national importance and to be a center of information for all matters relating to public health For want of appropriation this important body has ceased to exist, and since 1883 the duties relating to international and interstate quarantine have been discharged by the Surgeon-General of the U S Marine-Hospital Service, his bureau, apart from the management of hospitals and stations for the care of sick and disabled seamen of the merchant marine, has also undertaken the collection and dissemination of mortality statistics and sanitary information, scientific investigation into the causes of disease, the physical examination of immigrants under the law, excluding those affected with contagious disease—service in the office of consuls at foreign ports to assure the accuracy of bills of health—and other miscellaneous duties Since Congress has failed to act upon the President's repeated recommendation and the petition of numerous medical societies for the creation of a national health establishment, there is no good reason why the scope of duties and powers exercised by the Marine-Hospital Service should not be enlarged Indeed, the last Congress appropriated sufficient money for the erection for a laboratory "for the investigation of infectious and contagious diseases and matters pertaining to the public health," which marks the beginning of a new era in national sanitary legislation

NATIONAL AND INTERNATIONAL QUARANTINE

The question of an efficient system of national and international quarantine against Asiatic cholera, yellow fever, smallpox, typhoid fever, bubonic plague, leprosy has engaged the attention of sanitarians for years, especially since it become known that these diseases, particularly cholera, are generally carried along the highways of travel and commerce Special efforts were made after the completion of the Suez canal and other rapid transit facilities, to guard Europe from the invasion of cholera from India, and since 1892 these efforts have been quite fruitful At all events with efficient quarantine regulations involving inspection of vessels, passengers and crew, the detention of the sick and disinfection of all others, including personal effects, cargo and vessels, and proper notification, we have been enabled to keep these diseases from our shores, and if other nations do the same, they should be restricted to their original home General Wyman's plan, as outlined in his address before the Pan-American Medical Congress, contemplates an international system of sanitation, while his proposition refers especially to yellow fever in the Western Hemisphere, it is equally applicable to the home of cholera and the oriental plague

In the light of the recent researches by Reed and Carroll as to the transmission of yellow fever by means of mosquitoes, our views concerning quarantine and disinfection in this disease may have to be modified, but in the meantime the fight against the mosquitoes will go on, whether this will be effectually accomplished by insecticides and screens, or the more rational method of drainage of the soil, remains to be seen, in either event malarial countries will likewise be benefited

HAS HUMAN SUFFERING BEEN MITIGATED AND HUMAN LIFE GREATLY PROLONGED BY EFFORTS IN SANITATION?

Our answer is an emphatic "Yes" Professor Finkelnburg, of Bonn, estimates that the average length of human life in the sixteenth century was only between 18 and 20 years, at the close of the eighteenth, it was a little over 30 years, while to-day it is over 40 years, indeed the span of life since 1880 has been lengthened about six years as shown by statistics, in Mulhall's "Dictionary of Statistics" (4th edition, London, 1899)

The mortality of London between 1660 and 1678 was 80 per 1000 of inhabitants, from 1728 to 1780, 51 per 1000, from 1801 to 1835 it was still 29, while at the present time it averages betwen 17 and 19 per 1000

INFLUENCE OF SEWERS AND PUBLIC WATER-SUPPLIES

Without underestimating the brilliant achievements of Jenner's discovery of vaccination in 1796, which as a preventive measure has saved millions of lives, no two factors have contributed so much to the general result as the improvement of the air we breathe and the water we drink Indeed, we have ample evidence that, with the introduction of sewers and public water-supplies, the general mortality in numerous cities during the past forty years, has been reduced fully one-half, the good effects being especially shown by a marked decrease in the number of cases of typhoid fever, diarrheal diseases and consumption The vital statistics of Great Britain furnish the proof The mortality of Salisbury within the last thirty years has been reduced from 40 to 16 per 1000, at Dover, from 28 to 14 per 1000, at Rugby, from 24 to 10 per 1000, at Croydon, from 28 to 15 per 1000, and at Matlock, from 18 to 9 per 1000

The history of every sewered city shows a lessening of the typhoid death-rate subsequent to the construction of the sewers and that the typhoid rate is always higher in sections supplied with privy pits and box privies, than in the houses connected with sewers In 1895 the speaker pointed out that typhoid prevailed in the city of Washington and suburbs in 1 of 81 houses with privies and in only 1 in 149 of those connected with sewers, and the health officer of Nottingham has since then presented similar evidence The only reasonable explanation for this is that sewers carry away the filth that otherwise would contaminate the soil and ground water, but even if there were no wells, these makeshifts are still a source of danger in so far as they favor the

2 Information kindly furnished by Drs N S Davis Sr and Geo H Simmons letter of April 18 1901

transmission of the infection by means of flies, nor can the possibility be ignored that the germs in leaky or overflowing boxes may reach the upper layer of the soil, and, with pulverized dust, gain access to the system This conclusion, and the agency of flies in carrying the germs from box privies and other receptacles from typhoid stools to the food-supply, was enunciated in my report in 1895 and appears to have found ample support in the experience of the late Spanish-American War

INFLUENCE OF IMPROVED WATER-SUPPLIES

According to Dr Abbott, the number of towns in the United States before 1800 having a public water-supply was only 16, supplying about 2 8 per cent of the existing population, in 1850 there were only 83 public water-works, supplying about 10 6 per cent of the census population, in 1897 the total number was 3196, supplying about 41 6 per cent of the population

A summary of the evidence on this subject reveals the significant fact that cities, both at home and abroad, in which there has been the most marked decrease in typhoid fever death-rate, are those in which a pure supply has been substituted for a pre-existing contaminated one Thus, for example, the typhoid fever death-rate in Boston in 1846-1849 was still 17 4 per 10 000, in 1890-1892 it had fallen to 3 2 per 10,000, the city having in the meantime expended $25,000,000 on its water-supply The typhoid fever death-rate in Chicago from 1890 to 1892 averaged 12 5 per 10,000 After improving the water-supply it fell with every step in improvement until last year it was only 1 9 per 10,000, a total reduction of 84 8 during the decade The rate from this disease in Lawrence Mass, for five years prior to 1893, was 12 7 per 10,000 After the establishment of sand filters, in September, 1893, the rate fell during the first twelve months to 5 2 per 10,000

Munich was notorious for its excessive typhoid fever death-rate, it being 29 per 10,000 in 1856 With the introduction of a pure water-supply and improved sewer system it has fallen to less than 2 per 10,000 The experience of London, Berlin, Vienna, Albany and a host of other cities has been precisely the same [3]

SEWAGE DISPOSAL AND RIVER POLLUTION

When we remember that in 1896, 41 per cent of our population lived in towns having public water-supplies, and only 28 7 per cent in sewered towns, we fear that the municipal authorities have failed to recognize the necessity that a system of public sewerage must go hand in hand with the public water-supply, the neglect of which simply compels recourse to the various makeshifts for the collection and removal of excreta, and leads to soil pollution and all the other evils already referred to

In view of the fact that self-purification of rivers is a slow and uncertain process, and that streams once polluted with excrementitious matter can not be considered a safe water-supply, it is high time for civilized communities to take steps toward removing the danger to be found in rivers, which are the sewers and at the same time the sources of public water-supplies

We know, from statistics collected by the Marine-Hospital Service that the towns and cities located on the banks of the Ohio, Potomac, Mississippi, Merrimac, Connecticut Missouri, the Red, the Columbia and Wabash rivers show a marked prevalence of typhoid fever, confirming what has elsewhere been proved, that this disease as also cholera, dysentery and diarrheal diseases can be carried from one town or city to another by means of water-courses There were probably no fewer than 35,000 deaths caused by typhoid fever alone throughout the United States last year and, based upon an estimated mortality of 10 per cent, it is within reason to assume a yearly prevalence of 350,000 cases of this disease The average duration of a case of typhoid fever is not less than thirty days If we calculate that an average of $1 a day is expended for care, treatment and loss of work, and that the value of a human life is $5000, we have a total loss in the United States of $185,500 000 per annum, from one of the so-called preventable diseases Reduce the prevalence of this single disease one-half, which has been accomplished in England, and the oft-recurring question "How is it our fathers got along without these so-called modern improvements?" will be satisfactorily answered from an economic point of view

One of the most pressing needs is an investigation into the pollution of water-supplies when such pollution affects or threatens to affect the sanitary condition of the people of more than one state, because the individual states are powerless to protect themselves against the misdeeds of their neighbors Mr Barthold's bill for the appointment of a river pollution commission was defeated, yet that same Congress appropriated $40,000 for the extermination of the gipsy moth England enjoyed the benefit of such a commission as early as 1855, and, in order to prevent, remedy and remove the danger of polluted water-supplies, adopted a comprehensive system for the disposal of sewage and water filtration the fruits of which have already been referred to

No community or individual has a right to pollute streams used for public water-supplies any more than a man has to contaminate his neighbor's well This principle is very well appreciated by some of the nations in Europe Thus the inhabitants of a town in Belgium suffered from the effects of a river polluted by the French and the French Government not only compelled the offending town to dispose of its sewage by irrigation, but also granted a subsidy for this purpose

In the interest of public health it is to be hoped that every state in the Union will take steps toward the prevention of river pollution, except when towns are located close to the sea, and no lower towns are obliged to use the water for drinking purposes

In 1878 the British Government appointed a committee to inquire into the several methods of sewage disposal and concluded that it can be best and most cheaply disposed of by the process of land irrigation for agricultural purposes, but as this is not always practicable other modes of dealing with sewage have been proposed

It is a gratifying fact that within the past ten or twelve years over 100 communities in the United States have established plants for the disposal of sewage The first attempt was made in 1872 at the state insane asylum, Augusta, Me, since which time seventy-eight plants for the disposal by irrigation, and fifteen by chemical treatment have been established and over forty more projected

PURE FOOD AND DRUG LEGISLATION

The first movement toward securing comprehensive legislation against the adulteration of foods and drugs

3 In 25 cities using unfiltered water the average typhoid death rate is still 7 7 per 10 000 In 5 American cities supplied with water filtered by the American process the rate is 5 5 against a rate of 1 1 per 10 000 in cities supplied with water filtered by the natural or English method The average rate of 5 cities in Europe supplied with mountain springs or deep wells from unpolluted sources is only 0 7 per 10 000

in this country was made in 1879 This is all the more surprising because Dr Mann, in his "Medical Sketches of 1812" remarks that "the bread on the Niagara was made of damaged flour, such as was either not nutritious or absolutely deleterious" It was believed also that the flour contained in some instances an earthy substance, and that this adulterating substance was plaster-of-paris Again, during the Civil War, as early as the winter of 1861-62, an extract of coffee furnished the troops in the vicinity of Alexandria produced nausea and vomiting, and subsequently a government contractor, for having practiced food adulteration, was sentenced to a protracted imprisonment

Instances, therefore were not wanting pointing to the necessity of such laws, nevertheless, it was not until 1881 that three states, New Jersey, New York and Michigan passed laws to prevent the adulteration of food and drugs The law in New York commenced in the summer of 1882 At the close of the year 286 samples of food and drugs had been submitted to the public analyst for examination, of which 194 had been reported on Of 119 samples of food, 50 were found adulterated, while of 75 samples of drugs, 32 were adulterated

Since 1883 quite a number of states have enacted similar laws, but I regret to say that in spite of the absolute necessity for national legislation which has been agitated ever since 1892, so far every bill presented to Congress has failed to become a law, and food adulterated in one state can be taken to another and sold It would lead me entirely too far even to touch upon all the frauds which are daily perpetrated Some adulterations are harmful, others are not I will simply refer to a very universal article of food, viz, milk New York City obtains its milk-supply from five states, and amounted in 1896 to nearly 729,000 quarts a day Analysis of the milk sold some years ago showed an average dilution with 33 per cent of water The state inspector found 12 per cent water added and 20 per cent of cream removed, the fraud amounting to over $10,000 a day The results in St Louis, Chicago, and elsewhere were similar, and indicated the desirability of stringent laws to protect the pocket of the consumer, but when we remember the frightful infantile mortality, and the fact that the speaker has recently presented his conclusions, based upon 195 epidemics of typhoid fever, 99 of scarlet fever and 36 of diphtheria and that 52 of these outbreaks occurred in this country since 1882, we see at once that the milk traffic should be under strict sanitary control [4]

LAWS REGULATING THE SALE OF DRUGS AND POISONS

Forty-two states and territories have enacted laws to regulate the sale of poisons, but a careful study shows that they should be amended, and greater restriction placed on the sale of poisons generally A recent investigation by a committee of the Medical and Surgical Society into the extent of the opium and drug habit in the District of Columbia developed some interesting facts, and led to the conclusion that one class of subjects have developed the opium habit by the use of the milder preparation of opium and some of the various proprietary or secret remedies commonly employed as domestic remedies, such as paregoric, McMunn's elixir, chlorodyne, blackdrop, soothing syrup diarrhea mixtures, pain-killers, etc Those of another class have evidently acquired the habit by the constant use of prescriptions containing opium, or its preparations, for the relief of pain, the individuals being at first quite unconscious of the enslaving nature of the drug Still another class of persons belong to the moral degenerates of fast men and women who have acquired the habit by contact with opium habitues, including opium smokers, and through solicitation invitation and persuasion have fallen victims to the vice Since the opium habit is often established by the unauthorized and indiscriminate renewal of prescriptions containing opiates, the New York legislature very wisely enacted, in 1886, a law that no pharmacist shall refill more than once prescriptions containing opium or morphine, or preparations of either, in which the dose of opium shall exceed 1/4 grain, or morphine 1/20 grain, except with the verbal or written order of a physician

It is clearly the duty of the state to close opium dens and restrict the sale of poisons, and in regard to the sale of patent and proprietary medicines containing poisonous drugs the contents should be expressed on the label and the word poison added

PATENT AND PROPRIETARY MEDICINES

By the term patent medicine, as properly employed in this country, England and Europe generally, it must be understood that the composition is known and can be seen at the patent office The proprietary medicine is a secret preparation protected by a trade mark in this country, and hence preferred by the owner, but both are vaguely termed by the public patent medicines Up to Dec 10, 1900, the United States patent office had issued patents on the following [5] disinfectants, 321, extracts, 250, hair dyes and tonics, 48, insecticides, 180, internal remedies, 376, plasters, 56, topical remedies, 371, veterinary 78 Trade marks [6] drugs and chemicals, 319, medical compounds 5974, and increasing at the rate of about 250 a year

The proprietary medicines are subject to the control of the state authorities, and if containing alcohol in sufficient quantity to be intoxicants are subject to internal revenue laws, but so far as my knowledge extends, little or nothing has been done in this country and in England to control the sale of secret remedies Dr G Danford Thomas, Coroner of London and Middlesex, before the International Congress of Hygiene in 1891, very justly urged that all proprietary medicines should be under the patent laws, because the composition is at least disclosed, he would abolish licenses to sell them and confine the sale to chemists and druggists only In these matters we could certainly profit by the example of the Japanese, Italian French and German laws In the interest of public health the profession should demand adequate legislation, as it is now, hundreds of these proprietary preparations, the composition of which need not even be disclosed to the patent office, are advertised in medical journals

INDUSTRIAL HYGIENE

The relations of occupation to health and life were studied as early as 1700 by Ramazzini, an Italian physician, and since then numerous monographs have appeared We know to-day that persons habitually engaged in hard work, especially in factories and indoors, present a higher mortality than persons more favorably situated and that the character of occupations influ-

4 The results achieved by the health officers of every large city, notably by Reynolds, of Chicago, Wende of Buffalo, and Woodward of Washington, in the reduction of infantile mortality amounting in some instances to over 50 per cent, show the advantages of pure food legislation

5 Information kindly furnished by Dr J B Littlewood of the Patent Office

6 Information collected from files of the U S Patent Office by the author

ences, to a great extent, not only the average expectation of life, but also the prevalence of certain diseases We know, for example, that tuberculosis is much more frequent among persons engaged in dust-inhaling occupations, and that the sharp angular particles of iron and stone dust are more liable to produce lesions of the respiratory mucosa than coal, flour, grain and tobacco dust We know, too that certain establishments, like slaughter-houses, glue, soap and candle factories, chemical factories, etc, are more or less productive of noxious and offensive gases, and that workers in lead, mercury, arsenic phosphorus, poisonous dyes, etc, suffer especially from the injurious effects, and that other occupations, such as mining, railroading and contact with moving machinery, involve special danger to life and limb

For all these reasons the laboring classes need special protection, and in order to render this efficient, it must be provided for by the enactment and enforcement of suitable laws In 1864 1867 and 1870 England enacted the so-called factory laws According to Miss S S Whittlelsey's "Essay on Massachusetts Labor Legislation," child labor, here as in England, was the first aspect to receive attention in legislation as early as 1836 The first law as regards safety and sanitation was enacted in that state in 1877, since which time, from information kindly furnished by the Hon Carroll D Wright, of the U S Department of Labor, thirty-two states have enacted similar laws, including legislation requiring seats to be furnished saleswomen in stores and shops Indeed, in some of the states the latter requirement is the only sanitary regulation As a result of these laws, the majority of which were enacted during the last decade commendable progress has been made in the way of ventilation, heating, lighting, removal of dust and injurious gases, means of escape in case of fire and prevention of injuries by moving machinery

It is quite true there are other factors which affect the health and longevity of wage-earners adversely So, for instance, unsanitary dwellings, faulty nutrition—the results of badly prepared food and cold lunches—can not fail to lower the power of resistance to disease, especially when the individual, in consequence of these very causes has also become a victim of the alcohol habit

SANITARY DWELLINGS FOR WAGE-EARNERS

No field affords better opportunity for philanthropic work than the erection of sanitary homes for wage-earners at reasonable rentals, the encouragement of cookery schools, the establishment of sanitary lodgings, model eating-houses and other betterments of industrial conditions

The vital statistics of London show that the mortality in the improved dwellings for wage-earners is far below the general mortality of the city, the difference being specially marked in the infantile mortality, the general average during the five years ending December, 1890, was 153 per 1000 while in the "George Peabody" and the "Metropolitan dwellings" it was only 136 and 121 respectively[7]

RURAL HYGIENE

When we consider the fact that over 70 per cent of our population reside in rural districts, that the "bone and sinew" of these are engaged in agricultural pursuits, and that they do not enjoy the benefits of enforced sanitation by local health boards, we see at once the desirability of the family physician extending useful suggestions on healthful building sites and homes, disposal of house wastes, the importance of a pure water-supply, wholesome and properly cooked food, etc As it is now, the diet is faulty, especially the hot biscuits, greasy fried dishes, while wells and privies are often dangerous neighbors The undue prevalence of typhoid fever in rural districts could be materially checked by disinfecting the stools with three times the volume of boiling water and the adoption of the earth closet system This is all the more important since infection is often spread through the milk-supply, and many of our urban population contract disease in the country during the summer months While prompt disinfection of the excreta is the only rational method, we should also make an effort to get rid of the flies by prompt disposal of the horse manure in which they breed, the abandonment of open privies and surface pollution, removal of garbage and other fly-breeding matter

SANITATION OF PRISONS

Most commendable progress has been made in the construction and management of modern prisons The mortality at the close of the last century, among prisoners in some of the French prisons, was 250 per 1000, between 1840 and 1849 it was still 80 2 per 1000, at St Gallen, while to-day it is less than 30 per 1000 Tuberculosis, typhoid fever, diarrhea, croupous pneumonia and mental disorders are the most prevalent diseases but much will be done in future to reduce the excessive mortality by improved lighting, heating, ventilation, good food, bathing facilities, etc

In some of the damp, dark and gloomy prisons of Germany over 50 per cent of all the deaths are from consumption In the Mill-Bank prison of London, from 1825 to 1842, were 175 deaths, of which no less than 75 were due to tuberculosis Besides, 90 prisoners were set free on account of being hopelessly afflicted with pulmonary tuberculosis In the Illinois State Prison, at Joliet, during the year 1895, 39 deaths were reported from consumption, in 1900 only 8 occurred This decrease appears to be due directly to segregation of tuberculous subjects

HOSPITALS, SANITARIA AND DISPENSARIES

Perhaps no country in the world can boast of better hospital facilities than our own Indeed, many of our institutions are perfect in sanitary architecture and equipment There are in the United States no less than 1776 hospitals including 35 special hospitals for consumptives, 308 sanitaria, 213 dispensaries, and over 8000 mineral springs, of which 727 are health resorts Un-

7 At a recent meeting of the American Social Science Association held in Washington April 18 1901 Mr J H Patterson Dayton Ohio read a paper on factory sanitation and described a large manufacturing plant of which he is the head and their close adherence to the principles of hygiene and the uplifting of mankind The interior of the factory is painted in cheerful colors extra windows were made to give light, forced ventilation to afford plenty of fresh air and all dust and acid fumes are carried away by exhaust fans Bath rooms and well furnished toilet rooms are on all the floors All seats have backs Clean aprons are furnished by the company and a dining room where hot meals are served and a course in domestic economy is conducted The grounds around the factory and the houses of the employees are healthful and attractive We have demonstrated said Mr Patterson that this system pays the employee the manufacturer and the buyer in the health of one profit of the second and the improved quality of the product purchased by the third Bulletin No 31 Department of Labor November 1900 contains an article on betterment of industrial conditions showing what has elsewhere been accomplished every effort being in the right direction except that free medical attendance is being furnished by certain companies involving a contract system with physicians which ought never to gain a foothold on American soil because it has proved a bane to the profession elsewhere

fortunately the liberality with which medical charities have been supplied has given rise to shameful abuses, and persons who would shrink from seeking charity in any other form have abused the privileges offered by hospitals and dispensaries

Correction of Abuses—In 1896, speaking of the city of Washington no fewer than 21 per cent of the population received free medical treatment, the medical association in 1897 adopted certain rules compelling the attending staff of hospitals and dispensaries to require evidence of dependency as a result of this system there has been a gradual but positive decrease in the number of charity patients, amounting to over 9000 last year It is the simplest, most just and effective remedy for the correction of this evil

SCHOOL HYGIENE

During the year ending June 30, 1900, there were 15,341 220 children enrolled in the common schools of our country When we consider that the mental and physical vigor of a nation depends largely on the environments of childhood and youth, it seems strange that up to within forty years little or no attention should have been paid to the hygiene of schools The occurrence of so-called school diseases is not surprising when we reflect that children, on beginning school, enter upon a new life and environment Up to this time they have been allowed to run and play in the open air exercise the body and senses, without restraint but now without a period of transition they are obliged to remain for several hours a day in close and sometimes unsanitary school rooms, taxing their minds and straining their eyes for near objects Experience teaches and statistics confirm the conclusion, that quite a number of children suffer from certain physical defects and diseases, which because rarely observed before the school period, may be justly attributed to school environments Among the most common of these affections are myopia, lateral curvature of the spine, dyspepsia, anemia muscular debility, headache and nose-bleed, nervous affections and tuberculosis Ware, of our own country, as early as 1812 called attention to the fact that myopia was most frequently developed in the school room, and during the past forty years we have been enlightened as to the cause of this and other defects, and many excellent monographs have been written on the construction of school buildings, arrangement of recitation-rooms as regards light, ventilation, adjustable seats and desks, proper type for text-books and more rational methods of mental and physical training This, together with a commendable zeal on the part of the authorities to correct existing evils, has resulted in many reforms, the fruits of which are already apparent in a decrease of the diseases referred to

Medical Inspection—I can not enter into details concerning the prevention of the spread of infectious diseases among school children, but desire to emphasize the necessity of medical inspectors, whose duty it should be to visit the schools examine pupils, and give such directions as will reduce the dangers of spreading contagious diseases to a minimum, they should also make sanitary inspection of the buildings and present such recommendations as are necessary in the interest of the health of both the pupils and teachers, and as the physicians were perhaps the first to recognize the fact that "the system of education should be made to fit the child, not the child the system," the teachers may derive much aid from such consultations, among the cities that have inaugurated such inspections since 1894 are Boston New York, Brooklyn, Chicago, Milwaukee, Louisville, St Louis Philadelphia, Jersey City, Brookline, Mass, Buffalo, Minneapolis and Salt Lake City, and they have proved of inestimable value

SMALLPOX AND COMPULSORY VACCINATION

In this connection, attention is invited to the undue prevalence of smallpox in the United States, the total number of cases reported to the U S Marine-Hospital Service during the past fall and winter, up to March 29, was 11,964, as compared with 7279 cases for the corresponding period of the preceding year, and it is doubtless due to neglect in vaccination Dr Abbott estimates the vaccinated portion of the inhabitants of the United States at not far from 90 per cent, and the revaccinated portion at probably 50 per cent With the introduction of glycerinated animal lymph every vestige of prejudice against vaccination should cease and compulsory laws should be enacted in every state, so that smallpox here, as in the German army, may become practically unknown While quite a number of states have enacted laws requiring that unvaccinated children shall not be admitted to the public schools, it is believed that these laws are not rigidly enforced

VENEREAL DISEASES

A careful perusal of Dr Prince A Morrow's article on the "Prophylaxis of Venereal Diseases" (*Phila Med Jour*, April 6, 1901) should stimulate our efforts in the prevention of diseases, which affect not only the offender, but innocent wives, the offspring and not infrequently even the medical attendant According to Fournier one-seventh of the population of Paris is syphilitic, and Morrow, from statistics gathered in New York, believes it is quite possible that Fournier's figures with some modification, may apply to New York Neisser holds that gonorrhea is, with the exception of perhaps measles, the most widespread of all diseases Other German authorities have computed that fully three-quarters of the adult male population and one sixth or more of the adult females have contracted gonorrhea, that 80 per cent of all deaths from disease of the uterus and its adnexes are of gonorrheal origin while blenorrhea neonatorum contributes a contingent to our asylums for the blind estimated at from 10 to 20 per cent—from 40 to 60 per cent before the Crede method was instituted—not to mention the destructive effects on the procreative functions Dr S M Burnett of Georgetown University believes that 15,000 of the 50,000 blind persons in the United States lost their sight from this cause, which according to his calculation involves a financial loss to the commonwealth of seven and one-half millions annually

The measures which have been proposed for the control of the social evil and the prevention of its consequences are numerous enough, but not so easy of practical application On the whole I believe the remedy lies in public education, and the task as usual falls on the medical profession, especially the trusted family physician Public lecturers on the purity of man commit a serious mistake, however, when they picture the consequences of the social evil, without offering a suitable remedy We should make a strong plea in favor of continence and tell our young men that while the sexual passion is very strong it can be accelerated or delayed excited or lowered by the influence of the will We should assure them that by the cultivation of pure thought, removal of temptation, normal, mental and vigorous physical exercise continence may not only

become possible, but easy And we can hardly go astray if we follow Dr Parkes in advising a pure young man to make his home, after the age of 21, and thus secure himself both from the temptations and expenses of bachelorhood

THE MANAGEMENT AND CONTROL OF INFECTIOUS DISEASES

It is the field of infectious diseases where preventive medicine has and doubtless will continue to achieve its greatest triumphs, and there is ample room, when we consider that during the census year of 1890 there were not less than 102 199 deaths from consumption, 74,496 from pneumonia, 74,711 from diarrheal diseases, 41,677 from diphtheria, and 25,058 from typhoid fever In spite of centuries of groping after facts, we knew nothing of the real nature of infectious diseases until the middle of the present century, and even twenty-five years ago the text-books still discussed the subject of miasma and contagia whose nature had never been demonstrated to our senses With improved microscopic lenses and the development of bacteriology, more especially the discovery of the anthrax bacillus by Davaine, Pollender and Brauell (1849-1855), scientific medicine had its birth, and to-day we know that such diseases as tuberculosis, glanders, leprosy cholera, erysipelas, wound and puerperal infections gonorrhea, pneumonia, cerebrospinal meningitis, typhoid fever, diphtheria, malaria, influenza, dysentery, bubonic plague, and possibly carcinoma are caused by living organisms, capable of reproduction within and without the body, and this is a strong argument in favor of the microbic nature of other infectious diseases, in which the specific organism has not yet been isolated

The eradication of preventable diseases is the highest aim of scientific medicine to-day The public should be made familiar with the nature and causes of infectious diseases, and be taught that many are a source of danger, against which it is entitled to be warned by proper notification through the health officer This notification should be made compulsory in cholera, yellow fever, smallpox chicken-pox, typhus and typhoid fever, diphtheria and membranous croup, scarlet fever, tuberculosis, cerebrospinal meningitis, leprosy, glanders, bubonic plague, whooping-cough and measles And let me say that a prompt and correct diagnosis is the first and most important step in preventive measures The health department should have competent medical inspectors and a clinical laboratory for the verification of the diagnosis, and have the power in certain of these diseases to display warning signs, enforce isolation and disinfection, and to take such other steps in the way of immunizing agents as may be deemed necessary to limit their spread

Isolation, to be effective, should extend to all persons who have come in intimate contact with the patient, but this is rarely enforced except in smallpox, in the case of the attending physician, and the wage-earners of the family, but it is clearly their duty to take special precautions in the way of clothing and personal disinfection Matters of this kind ought never to be left to the discretion of the family, nor the attending physicians, for even members of the profession often entertain widely opposing opinions on the subject of quarantine and disinfection, but the principles which ought to be carried out, apart from being a matter of conscience, should be accepted in a practical sense and embodied in effective laws

Disinfection —Scientific disinfection had its inception with the labors of Koch and Sternberg some twenty years ago Although, as we have seen, certain physical and chemical agents were used empirically for ages, now we know from laboratory experiments that they are effective, because they destroy the vitality of the germs We also know that, in most of the contagious diseases, the infective matter is given off by the patient chiefly through the secretions and excretions, and it is evident that disinfection to be of value must be directed to these and all the media with which the patient has come in contact

"IF CERTAIN DISEASES ARE PREVENTABLE, WHY ARE THEY NOT PREVENTED?"

My answer is, that while every scientific physician familiar with biologic research knows full well that if the methods of prevention recommended by sanitarians, including the prompt disinfection of the dejecta of every typhoid fever patient, the expectoration and excretions of diphtheria and tuberculosis patients, for example, were adopted, these diseases would be reduced to a minimum and probably eradicated in the course of a few years The facts are these recommendations have not been generally adopted, because the knowledge gained by experimental medicine is not sufficiently diffused Nor are we responsible for the fact that so many of our states still permit every charlatan to practice one of the most difficult and responsible of all professions without a uniform and rigid system of examination However, we owe it to ourselves and to humanity to take positive steps in behalf of higher medical education and laws regulating the practice of medicine So long as we permit the existence of irregular and incompetent practitioners, so long will the public be deceived, and so long as we tolerate the exponents of so-called "Christian Science," osteopathy, and other quacks, infectious diseases will be spread as the result of ignorance and neglect A strong organization, such as is proposed for the AMERICAN MEDICAL ASSOCIATION and the various state medical societies will speedily accomplish this and other reforms

[During the year 1900 there were 119 regular medical schools in this country, with 1079 female and 21,673 male students, of these 22,752 students, 2327, or about 10 per cent, had degrees of A B or B L Number of graduates last year, 4720 The homeopathic schools had 1584 male and 325 female students, and the eclectics 500 male and 52 female students The number of registered physicians in the United States in 1900 shows an average for the whole of about 1 to 636 inhabitants In 31 states and territories, according to D McIntyre, an examination is required, in 9 certain diplomas are accepted, all others must be examined, in 5 only a diploma is required, and in 5 the laws practically impose no restriction In 1900 there were 150 national and state medical societies, 1097 county and local medical societies, and 282 medical journals, of which 28 were exclusively devoted to hygiene and public health]

FORECAST OF THE RESULT OF THE CENSUS WORK UPON THE MORTALITY STATISTICS

Notwithstanding these and other disadvantages in the way of defective sanitary legislation, the American medical profession has reason to be proud of its work in the century's progress of hygiene and preventive medicine It may be truly said that every hospital or other medical charity owes its foundation and success to the activities of the medical profession Nay every law inscribed on the statute books, in the interest of public health in this and other countries is the work of our noble profession Acting upon the lofty principle that the education and betterment of the people in sanitation is not less humane than the healing of the

sick, the American medical profession has filled the measures of its philanthrophy by advocating laws to "regulate the health and physical well-being of communities," and thereby lessen its own income, but the results obtained during the last ten years are sufficient recompense By the courtesy of Mr Wm A King, Chief Statiscian of the U S Census Bureau, I am enabled to give you a forecast of the result of the work upon the mortality statistics at the close of the century

The mortality returns for the twelfth census, which relate to the year beginning June 1, 1899, and ending May 31, 1900, have not yet been tabulated in full, but sufficient progress has been made to permit a comparison of the preliminary results with the figures for 1890 for a portion of the country

Considering these results for these states in which the returns were secured from registration records in both 1890 and 1900, there appears to have been an absolute decrease in the general death-rate of about 1 5 per 1000 of population This decrease seems to be most marked in the rates due to scarlet fever, whooping-cough, diphtheria and croup (combined), typhoid fever, malarial fever, consumption, diarrheal diseases, and diseases of the nervous system, the decrease in the mortality from diphtheria and croup amounting to more than 50 per cent On the other hand the rates due to carcinoma and tumor (combined), Bright's disease, heart disease and dropsy (combined), and pneumonia are apparently greater than in 1890, the increase being most marked in case of Bright's disease, carcinoma and tumor, and pneumonia

The death-rate by age periods in the registration states has not yet been computed as the population figures are not yet available, but the effect of the decrease in the rates due to the causes specified is shown by a decrease in the proportion of deaths occurring at each period up to 30 years

The results in the decreased rate of diphtheria, croup, scarlet fever typhoid fever, whooping-cough, consumption, malarial fever and diarrheal diseases are the direct outcome of preventive medicine and are as gratifying as they are striking We note with regret the increased rate in Bright's disease, heart disease, dropsy and pneumonia, and may well pause to inquire whether our ever-increasing "National Drink Bill," averaging 17 68 gallons per capita, may not be a factor in the development of these diseases, especially since there is reason to believe that the habitual and immoderate use of alcohol, apart from increasing the connective tissue and causing cirrhosis, also produces fatty degeneration especially of the heart, liver and arterial coats, probably because it promotes the conversion of albuminoids into fats

Without wishing to under-rate the brilliant achievements in surgery of the brain, stomach, intestines, liver, gall-bladder and other abdominal organs, and even wounds of the human heart which have been successfully sutured in four of the nine cases reported, what after all are the ultimate benefits compared with the results obtained by improved methods in sanitation?

Since our knowledge of the nature of infectious diseases has been more and more defined, scientific methods for their prevention have been applied We have learned, too, that in addition to the germ there must be a suitable soil for its proliferation and that sanitation will not only destroy the environments for its development without the body, but also place the system in the best possible condition to resist its toxic action

The application of this knowledge has saved millions of lives besides an incalculable amount of human suffering and distress not to mention the economic aspect of the question When we remember all this and the fact that Jenner's discovery at the close of the last century, of a fundamental and practical method of producing artificial immunity, has been far eclipsed in the last twenty years, and that we possess to-day not only curative but also protective sera for diphtheria, erysipelas, tetanus, plague and possibly cholera, tuberculosis, typhoid fever, pneumonia and a number of other immunizing agents for diseases of man and lower animals, we have reason to believe that the solution of the problem of immunity is only a question of time, and we may indeed expect great possibilities in our battle against infectious diseases

To the solution of this problem, the labors of Salmon and Smith, Sternberg, Welch, Osler, Councilman, Reed and other Americans engaged in experimental medicine have contributed their full share Progress has crowned our past we will not retrograde Let our conduct raise no blush on the cheek of posterity Let us hand in hand with heart and mind join in promoting the welfare of American medicine, until she has reached the proudest pinnacle in the world of science, until she has become the fountain-head of knowledge for the benefit of mankind Then when at last we are called upon to pass through the portals beyond, Minerva Medica, in her sweeping robes of state, will proudly but reverently present us to the Supreme Healer of the Universe as types of the true physician [8]

Symptoms of an Affection of the Pancreas—Schierchewski calls attention to the fact that the pancreas lies directly above the aorta and its plexus and receives its blood supply from the same vessels as the liver and spleen It is therefore probable that an affection of the spleen is usually complicated by a sympathetic lesion in the pancreas Slight enlargement of the pancreas compresses the aortic plexus but as the enlargement progresses, the lumen of the aorta is also compressed and below this point the aortic sound is transformed into a murmur A constant murmur, therefore in the aorta indicates enlargement of the pancreas Changes in the size of the spleen in the course of a few days, suggest an affection of the pancreas in the absence of malaria Compression of the aortic plexus causes girdle pains and typical pains in the bladder and ureter They are inconstant, resemble gall stone colic are more or less periodical, appear soon after eating and last one or two hours They frequently appear at 1 to 2 a m They are not severe but are accompanied by intense nausea and weakness They are never accompanied by defecation and have no connection with the amount or quality of the food Another symptom is a pulsation in the stomach region, with cardiac distress and palpitations, independent of the condition of the stomach or ingestion of food In most of his fourteen cases there was a history of malaria six or seven years previously Malarial cachexia is probably due to an affection of the pancreas in many cases In four patients the influence of a trauma was evident He administered pancreatin in doses of 3 gm after meals, with or without 01 ext bella donne, with plastic clay on the stomach region, sometimes alternating with ice Devoto has recently announced that any factors, traumatic or otherwise, which diminish the resistance of the organ or allow the penetration of the bacterium coli into the pancreatic duct, favor the evolution of acute pancreatitis It may be accompanied by effusion, hemorrhagic or not, or by suppuration

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8 In the preparation of this address, I have been greatly aided by the Library of the Surgeon General's Office, the historical monographs on hygiene, by Professor Finkelnburg, of Bonn now deceased, and Dr S W Abbott, of our own country I am also greatly indebted to Dr W T Harris, the Commissioner of Education, and Dr A E Miller of his Bureau Other acknowledgments have been made in the text and are gratefully renewed

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THE DISINTEGRATION OF THE PERSONALITY

Cases of so-called double consciousness or multiple personality are rather numerous in medical and psychologic literature and are generally of a common type—the individual possesses or is subject to two conditions of consciousness, in either or both of which he or she is unconscious or amnesic of his doings in the other Such conditions are not at all infrequent in epileptics and often afford opportunities for interesting studies and speculations It is not often, however, that we have a well reported observation of multiple personalties, coexisting as it were simultaneously in the subject from their first appearance to their final exit from the scene What appears to be such a case forms the subject of a recent article by Dr Morton Prince,[1] whose reputation as a physician and neurologist gives it the credibility that might otherwise be questioned

The subject was a neurasthenic young woman in whom a second state of consciousness could be induced by hypnotism Upon both these was superimposed a third state, which became continuous This third personality, which Dr Prince calls B III, and identifies with the subliminal consciousness, was co-existent with and independent of the other personality, B I, knew all her thoughts, while with B I the reverse was true B III was morally deficient and lively in disposition and hated B I, who was hyperconscientious and depressed, and delighted in annoying and playing tricks upon her Still later a fourth personality was superinduced upon both of these, which Dr Prince calls B IV This was, in some respects, like B I, but different in several important particulars, unimpressionable, quick tempered, not a musician, etc By a course of reasoning founded upon close observation and the complete history of the case, Prince concluded that none of these four personalities fully represented the original Miss B, who, owing to a severe mental shock became disintegrated and "as a complete psychical composition departed this life in 1893 B I and B IV are each different disintegrated parts of the complete Miss B In these disintegrations of the primary consciousness, a certain portion split itself off and became dormant The remainder persisted as a modified personality, B I" B II was simply B I or B IV hypnotized, while B III is the independent subliminal self The conclusions which Prince considers justified by this case, are 1 The subliminal self may become developed into a true independent personality, which may be awake contemporaneously with the primary consciousness, or may be awake alone, the other personalities being asleep 2 Other so-called and apparent personalities may be nothing more than the primary self, mutilated by disintegration 3 The absence of knowledge, and hence amnesia, on the part of the primary self of the subliminal is dependent on the normal psychophysiologic arrangements 4 The amnesia of one mutilated self for another mutilated self is due to disintegration and to a severance and rearrangement of psychophysiologic associations 5 Theoretically any number of personalities are possible according to the number and direction of the lines of cleavage Each personality would depend on different combinations of different disintegrated pieces of the normal self 6 Personalities may develop accidentally, as the result of accidental fracture, without design, and not be the result of education 7 The subliminal consciousness is not necessarily the equivalent of the hypnotic self 8 Personalities may represent any different psychic compounds One may be that peculiar group of psychic elements which is called the subliminal self, and another may be a disintegrated compound of the ordinary supernatant self 9 Two or more personalities may have successive existences in time, or when one is the subliminal self they may be coexistent 10 Personalities, including the subliminal self may be hypnotized, and thus the personalities may become still further disintegrated

The details given by Prince, of this case, read almost like a fairy story, but it is obviously impossible to reproduce them more fully here It is, in its way, a remarkable case from a psychologic point of view but its medical interest is largely in that it is reported by an eminent neurologist presumably well qualified to study and detect hysteric manifestations and imposition, if they occurred If the conclusions are accepted, their suggestiveness in many cases of mental derangement will occur readily to many who have had a wide experience with morbid mentality These possibilities of disintegration of the self do not seem, at first sight at least to simplify matters, but it may be otherwise estimated by the psychologists Thus far the case has apparently escaped notice in medical literature, but it is as striking, or even more so, as the classic cases, so often quoted, of Azam, Mesnet and others

[1] Proc Soc. Psych Research xi Feb 1901

SCLERODERMA WITH FACTITIOUS URTICARIA

It would appear that two sets of affections result from deranged function of the thyroid gland, one due to excessive and the other to diminished activity The type of those belonging in the first group is exophthalmic goiter, by the side of which it is possible there may be ranged a number of disorders that have been comprehensively included in the designation "vasomotor ataxia," such as symmetrical gangrene, morbid blushing and flushing and dermographism or factitious urticaria In the second group belong myxedema and cre-

tinism, probably also scleroderma and possibly adiposis

There are on record cases in which a case beginning as exophthalmic goiter has in the course of time been transformed into one of myxedema, and factitious urticaria not rarely appears in association with scleroderma, so that we have here evidence of the apparently paradoxic fact that there may be present in the same case at the same time indications both of increased and of diminished activity in the function of the thyroid gland Bettmann[1] has recently placed on record two cases of scleroderma attended with factitious urticaria of a peculiar type One of these occurred in a military officer 39 years old, who for four or five months had noted moderate but progressive swelling of both hands, with a sense of coldness in some of the fingers occasional cyanosis and pallor and circumscribed sloughing Slight swelling appeared also in the feet, and indurated areas could be felt in the abdominal wall From time to time, without appreciable cause hard swellings developed on the feet, pitting on pressure and disappearing in the course of a few hours In addition transitory irregularly circumscribed painful red spots appeared, especially on the soles At points where the cathode was applied in the course of electric treatment redness resulted, persisting at times for twenty-four hours—on one occasion gooseflesh, likewise lasting for hours On drawing the fingernail rapidly and without great pressure over the skin of the chest and the back factitious urticaria developed slowly, attaining its maximum intensity in the course of a few minutes, but persisting for an unusually long time—even for five or six days The second patient was a machinist 26 years old with circumscribed induration of the abdominal wall and of the right lower extremity In this case also factitious urticaria of slow development and lasting for twenty hours could be induced by irritation of the skin of the chest and the back

Factitious urticaria of from eight to twenty-four hours' duration is exceptional although it has been observed, but there is no previous record of a duration of six days In the first case reported the condition persisted unchanged during the two months the patient remained under observation In the second it subsided coincidently with improvement in the general state. It is impossible to determine whether the peculiar manifestation was related to the scleroderma, either primarily or secondarily, or whether it was merely a coincidental and independent disorder

1 Berliner Klin Woch, 1901, No 14 p 365

INFLUENZA OR PULMONARY TUBERCULOSIS?

Since the pandemic of influenza ten years ago there have been annual recrudescences of the disease and on such intimate terms with it has the laity gotten that it feels competent to make the diagnosis, so that any obscure illness during the winter is likely to be looked upon as influenza The symptomatology of this disorder, furthermore, is not so sharply defined as always to permit of ready diagnosis, even by the physician, and we fear that the bacteriologic evidence is not often invoked It would, therefore, not be surprising if much of that which is designated influenza were found actually to be something else

Dr R J M Buchanan[1] makes the not improbable suggestion that many of the so-called sporadic cases of influenza are really symptomatic of the initial infection of tuberculosis, or possibly an exacerbation of a latent tuberculosis previously unsuspected or undetected Some support is apparently given to this view by the contention of a recent writer[2] that influenza is one of the most *important predisposing factors in the etiology of tuberculosis*

The following clinical picture may be observed The patient is seized with headache, rheumatic pains in the lower extremities, with tenderness in the fingers a feeling of heaviness in the legs and a sense of swelling of the feet, sensations of chilliness alternating with warmth, sweating on slight exertion, increased frequency of pulse and elevation of temperature Cough develops with pain on one or the other side, often at the level of the angle of the scapula or in the interscapular or infraclavicular region on one or the other side of the sternum and tightness and constriction of the chest On auscultation, crepitation may be audible over a small area of the lungs, not uncommonly about the angle of one or the other scapula The expectoration may be slight and clear, or more tenacious and presenting a gelatinous appearance The symptoms may subside in the course of a few days, the temperature decline by lysis, convalescence ensue and complete recovery take place This may be permanent or it may be followed by a return of the previous symptoms *In other cases there may be* noted a slowly developing lack of energy and an undue readiness of fatigue The appetite fails and becomes capricious Weight is lost and pallor appears

The lesson taught by observations like these is that the diagnosis of influenza should not be made too lightly and that in any event the possibility of tuberculosis should be considered and, so far as possible, excluded The probability of cure in cases of tuberculosis is directly proportionate to the promptness with which appropriate treatment is instituted

1 Liverpool Medico Chirurgical Journal March, 1901 p 38

2 Dr J Ruhemann 'Aetiologie und Prophylaxe der Lungentuberkulose,' Jena, 1900

ILL CONSIDERED SENTIMENTALISM

The trustees of a Chicago juvenile reformatory institution refused to permit the boys under their care to be examined with reference to their physical and mental peculiarities, etc, on the ground that it was, as a local newspaper expresses it, "a sort of psychologic vivisection with incidental publicity" It was held, apparently, that it would be cruelty to subject youthful criminals to any examinations for the purpose of testing for the signs of

degeneracy Nothing should be done to make them feel their degradation, and such procedures as were proposed were considered, in the language of the editorial commending the course of the trustees, as "unwarranted intrusion and gratuitous insult" The consideration for juvenile criminals is in line with that for older ones, which seems at times to become a dominating idea of certain sentimental reformers It should be remembered that the public-school children of Chicago had been put through similar tests without protest, and the publicity would be only of the collective results and not of individual defects The plea of "gratuitous insult" is, therefore, rather unwarranted, and the refusal looks like a confession of degeneracy and a plea for avoidance of its demonstration Since such investigations have a certain value to the public, and there is no sound reason for their hindrance, the act of the officials in refusing to permit them in this case can be considered as hardly anything less than a malfeasance in office as well as an exhibition of silly sentimentalism

BIG PAY FOR A BEGINNER

The practice of medicine is not considered usually as the most rapid method of building up a fortune and there is no general impression that is better supported by facts Occasionally, however, like thunder out of a clear sky, something happens that apparently reverses the order of things, and such has just been reported by the Chicago dailies What is said to be one of the largest claims ever filed against an estate in the local probate court is the charge of $100,000, by a woman physician of Chicago, against the estate of a millionaire who died in June 1900, for medical attendance and services under an alleged special contract, according to which she was to care for him as long as he lived It is not the size of the bill alone that astounds one, but the apparent attending circumstances She graduated in the spring of 1897 The millionaire died in June, 1900 Hence her medical services as a qualified practitioner could hardly have extended much over two years This gives the handsome income of nearly $50 000 a year from the date of graduation Such prizes as this fall to but few, and if the facts are as reported, and the still more important "if" in regard to the collection of her bill results according to her demand, she will be colossally eminent among the practitioners of her sex Whether she collects her bill or not, she has attained a notoriety, which she may consider desirable, it is not an altogether unnatural suggestion that such demands on estates are sometimes made for the personal advertisement they bring

PRESIDENT ELECT DR JOHN A WYETH

The newly-elected President of the AMERICAN MEDICAL ASSOCIATION, Dr John Allan Wyeth, is a southerner, having been born May 26 1845, in Marshall County, Ala His father was Judge Louis Wyeth of Alabama, his grandfather, John Wyeth, one of the early publishers of Philadelphia His early education was received at the Lagrange Military Academy and during the civil war he served as a private soldier in the 4th Alabama Cavalry Some of his experiences therein have served for subjects of his later literary work His medical studies were carried on in the University of Louisville, and later at Bellevue Hospital Medical College, New York After a brief period of practice in Alabama he removed to New York City, where he quickly became a prominent figure in the profession, taking almost at once a position on the teaching force of his alma mater and also an active part in society proceedings and medical matters generally Since then his record is before the profession, it is needless to say that it is an honorable one, and one that includes numerous

and valuable contributions to the sum of medical knowledge It is indeed by his practical work in surgery that he is best known to the general profession, and this has made his name a familiar one to every practicing physician His contributions to surgery and other departments need not be enumerated, they include not only many articles in the current medical literature, but also a well-known text-book and other works of note It is not only as a scientific medical writer that he is known, he has contributed also to general literature, his best known work being his life of General N B Forrest, which has a decided historic as well as a literary value

THE CORPUSCULAR HYPOTHESIS

Up to the present the atom has been looked upon as the expression of the ultimate divisibility of matter, and all our theories have been moulded on this conception No chemical inference has been able as yet to make probable any breaking up of this unit, but recent physical research seems likely to undermine our belief in its indivisibility In a recent lecture on cathode-ray phenomena, Prof J J Thomson demonstrated the results of a series of remarkable studies of certain electrical phenomena that indicate the possibility that what we have been calling atoms, and considering as the ultimate particles, are themselves only combinations or constellations of still more minute bodies The details of these researches are too elaborate to be reproduced and, though stated in a semipopular form by Professor Thomson, are still not easy to make readily comprehensible to the casual reader not already considerably familiar with the physics of electricity Taking only the statement of the results as given, it would appear that the particles sent out by the cathode rays, and also from certain metals or minerals such for example as radium, and from all metals when sufficiently heated, convey charges of electricity which, supposing them to be atoms, are one thousand times greater than is carried by an ion in electrolysis By an ingenious calculation based on certain known facts on condensation of moisture, Professor Thomson has been able to demonstrate that the charge conveyed was the same as in electrolysis, but that the particles conveying it were only one-thousandth the weight of a hydrogen atom These corpuscles, as they have been named, are always negatively electrified, as far as known nothing smaller than an atom is ever positively electrified The final outcome of these researches, as the *Electrical Review* says, lies "in the womb of the future," but the suggestion, however indefinite it may be, of their possibilities, is inevitable We have only to consider what has been already gained from the X-ray in medicine and surgery to see the probability of rational explanations in the future of much of what has been and is still to us mysterious and unknown It is not worth while, however, to build on these results any too expansive deductions To quote again from the *Electrical Review* "The puzzle of the universe will no doubt be only moved back one step further by Professor Thomson's discoveries, and we shall doubtless be as far as ever from the dream of the materialists of the middle portion of the past century, who looked to an explanation of the cosmos on purely mechanical lines"

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH

From apparently authentic sources, it is announced that the preliminary steps have been taken for the establishment in New York City of an institute for medical research, by Mr John D Rockefeller, whose name it is to bear That he has seen fit to set aside a considerable sum of money for the advancement of medical science in this country will be hailed with universal approbation We hope that his example may not long remain isolated but that other wealthy men with liberal tendencies may find medicine and medical institutions, hitherto somewhat neglected, worthy objects for their generosity The eloquent plea of Dr W W Keen,[1] in his presidential address before the AMERICAN MEDICAL ASSOCIATION last year, for endowments for medical institutions sets forth most adequately the special grounds why endowments are needed, and it is certainly encouraging and stimulating to learn that Mr Rockefeller has become a patron of scientific medicine The purpose of the institute is to furnish facilities for original investigation, particularly in such problems in medicine and hygiene as bear upon the prevention and treatment of disease The board of directors is composed of prominent pathologists and physicians in the large cities along the Atlantic coast, four of the seven members residing in New York It is not intended to build immediately, but abundant funds have been placed at the disposal of the board so that research will be undertaken at once in several different laboratories Buildings and equipment commensurate with the scope and aim of the foundation will receive consideration later This announcement is a fitting one for the beginning of the new century, and it is fraught with great benefits to medicine in general It will ultimately result in the establishment in New York City of an institution similar to the Pasteur Institute in Paris, the Institute for Infectious Diseases in Berlin, the Institute for Experimental Medicine in St Petersburg, and the Jenner Institute in London At this institute will be collected able original investigators, who will bend their energies to the solution of hidden problems in medical science unhampered by other and often quite irksome duties The plan adopted in regard to the work for the immediate future increases the opportunities for research very greatly indeed, and will appeal strongly to young men who are looking for just such advantages It stands to reason however, that the general and actual results to be expected from this plan can hardly equal in importance those that will be obtained when trained, mature investigators set to work in a properly equipped and fully organized institute

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SMALLPOX PROBABLY SPREAD BY INFECTED FEATHER BED —The State Communicable Disease Inspector has reported to the Michigan State Board of Health office that in one case of smallpox which he visited recently he was informed that the child sick with smallpox had been for a few nights sleeping on the same feather bed on which one of the relatives of the family laid in Missouri in which family smallpox existed, about two years ago There was no other known source from which the disease could have been contracted by the child The feather bed was sent to the family in Michigan from the family in Missouri some little time ago This should be a warning to persons having dangerous communicable diseases in their families, to be sure that all things are thoroughly disinfected before using them again

TO REMOVE ADHERENT DRESSINGS —Mikulicz moistens the edges of the gauze with a little peroxid of hydrogen, and no matter how firmly they may be attached or mixed with the tissues, the effervesence of the peroxid mechanically detaches them at once, without the slightest pain or inconvenience

1 JOUR A M A June 9, 1900

Association News

AMERICAN MEDICAL ASSOCIATION

Fifty second Annual Meeting, held at St Paul, Minnesota, June 4 7, 1901

OFFICIAL MINUTES OF THE GENERAL SESSIONS

JUNE 4—FIRST GENERAL SESSION

The Association met in the Metropolitan Opera House, and was called to order at 10 20 a m by the Chairman of the Committee of Arrangements Dr John F Fulton, of St Paul

Prayer was offered by Bishop H B Whipple, after which Dr Fulton introduced the Hon R A Smith, Mayor of St Paul, who delivered an address of welcome

Address of Welcome

In behalf of the City of St Paul I extend to you my most cordial welcome Aside from the natural pride which each man has in the community in which his life is cast I believe there is much to warrant me in extending to you my congratulations on selecting St. Paul as the scene of your National Convention Here you have exemplified, to an extent visible perhaps nowhere else in the world, the magic influence on the public and the individual health of favorable natural conditions These natural conditions have been availed of to the utmost by the local members of your profession in the practice of their grand calling so that your present hosts, the good people of St Paul thus enjoy the double blessing of long life and small doctor bills

St Paul as the statistical records of mortality show, is the healthiest city in the world, and it is so, I believe, in greatest measure, because of the high degree of perfection to which your profession has brought the science of hygiene To the individual members of your profession among our fellow citizens, and especially to those of them who have from time to time been charged in our official life with the protection of the health of our people, we all regard ourselves as deeply indebted Their profession, too, is indebted to them for the splendid demonstration they have here offered of the wonderful results which can be accomplished through the intelligent direction of the skilled physician and surgeon

Within the lifetime of a single generation the soil upon which you now stand has upheld the Indian tepee Here the Indian Medicine Man has, within that period, wrought his charms The Indian tepee has been succeeded by the modern equipped hospital and the sanitary human dwelling, the incantations of the Indian doctor are forever silenced, and the cold and impersonal influence of medical and surgical science—as typified in the Medicine Man of Civilization—sways the lives and conserves and protects the health and happiness of human society The change from the old conditions to the new, as illustrated in fifty years of life in the Capital City of the Great Northwest is such as not only the members of your profession but humanity itself, should rejoice in

In common with all our people I sincerely hope that your stay with us will bring to each and every one of you that sense of pleasure, and leave with you those cherished recollections which enter so largely into the delights of the lives of all of us The welcome which the people of our city extend to you is indeed a sincere one and I beg of you not to measure its depths by my own unfortunate inability to give expression to it

If most of you should not as I believe you will not, come among us again, I feel that it is good advice for all of you to take with you—that if you can not come again yourselves you will at least send us those of your patients whom you can not cure and we will send them back to you in such a condition of health that if they are not thereafter living monuments to your skill they will at least all live long enough to prevent any alarming fluctuations in the visible supply of patients (Applause)

After the address of welcome by Mayor Smith, Dr Fulton presented the President of the Association, Dr Charles A L Reed of Cincinnati, Ohio

President Reed, on taking the chair, invited the vice presidents and all ex presidents of the Association who were present to take seats upon the platform

Dr Philip Marvel, of Atlantic City, third vice president, took the chair, and President Reed delivered his address, which was punctuated with applause throughout its delivery

At the close of the address, Dr Ingals, of Illinois, moved that the President's address be referred to the Executive Committee, with instructions to report back to the Association on its many valuable recommendations He moved further that the thanks of the Association be extended to the President for his able address and for the careful review of the numerous subjects of interest to the Association Carried

At this juncture, Dr J R Pennington, of Chicago, made a brief speech, during which he unveiled the portrait of Dr N S Davis, of Chicago, the subject of his remarks

Presentation of Portrait of Dr N S Davis

Mr President and Members of the American Medical Association Of all the methods adopted by artists for perpetuating the memory of those who have acquired distinction in any department of human activity, none, as suggested by the President in his able address, are more pleasing to the majority of intelligent men and women than correct portraits that present, not only the contour, but also much of the living expression of those they represent Consequently a large proportion of the higher educational institutions and permanently organized scientific, philosophic and professional organizations, seek to preserve the portraits of their founders and more distinguished members as a part of their permanent archives

In the hope of initiating work in this part of the archives of the American Medical Association, I come prepared to present for your acceptance the portrait of *one* whom you will all recognize as pre eminently the founder of this Association, and for more than fifty years its most constant attendant and faithful guide in every department of its work One who has perhaps done more than any other individual in promoting the efficient social organization of the medical profession throughout the United States, and in elevating the standard of medical education One who has been a pioneer investigator in the departments of physiology, hygiene, preventive medicine and medical journalism One who has been an untiring and valuable contributor to medical science and literature, and who has enjoyed the highest official honors that his profession could bestow—President of this Association and of the Ninth International Medical Congress One who in his own city organized the first permanent general hospital and established clinical instruction therein, and who was one of the founders and active supporters of the Chicago Relief and Aid Society for aid to the poor, of the Chicago Academy of Sciences, the Chicago Historical Society and the Chicago Medical Society One who has been a life long advocate and exemplar of temperance, morality and religion, and who still, in his 85th year of life and 65th year of medical practice, devotes five or six hours daily to his patients and attends promptly to all the duties of good citizenship in strict obedience to his favorite maxim, "He is most happy who is contributing most to the happiness of others"

Now, Mr President I have the honor of unveiling the portrait of Dr N S Davis, the subject of these remarks, and trust that its acceptance will carry with it the appointment of a committee to secure without cost to the Association the portraits of all the ex Presidents of the American Medical Association

On motion of Dr Warner, the portrait of Dr Davis was accepted by the Association, and thanks extended to Dr Pennington for its presentation

Dr Love, of New York, moved the appointment of a committee of three for the purpose of securing portraits of all living presidents and ex presidents of the Association as far as possible, and expressed the hope that the time would come when the Association would have a magnificent home with a building of its own in which upon the walls may be hung the portraits of the living presidents of the Association and the noble men who had died Carried.

The President announced that he would appoint this committee later

Dr Simmons, the Secretary, then read his report, which was referred to the General Executive Committee

Report of Secretary

To the Officers and Members of the American Medical Association As nothing of especial importance has arisen during the past year in connection with my office, my report as Secretary will be brief and will consist in simply congratulating you on the continued increase in membership and the prosperity of the Association The membership at the present time is some

thing over 10,600, which shows an increase over last year of between 1500 and 1600—the largest increase in any year in the history of the Association I have submitted to the Judicial Council, *pro forma*, correspondence in regard to two special cases of membership for its decision and advice

I wish to call attention to Article VIII of the Constitution, under duties of the "Committee of Arrangements" In this article is the following "It shall be the further duty of this committee to verify and report upon the credentials of membership, to receive and announce all essays and memoirs voluntarily communicated, either by members of the Association, or by others through them, and to determine the order in which such papers are to be read and considered, and to fix a definite hour each day for the general addresses before the Association This committee shall prepare for publication the official program of each meeting, and with such program it shall publish the Constitution, By laws and Code of Ethics of the American Medical Association"

I also call attention to Section 5 of Article III of the By laws the first paragraph of which is as follows "It shall be the duty of every member of the Association who proposes to present a paper or report before a Section, to forward either the paper or an abstract indicative of its contents, and its length, to the Chairman of the Committee of Arrangements," etc As the above duties have for years, and are now, performed by the Secretary, I would suggest that the Constitution and By laws be amended to accord with existing conditions in this regard Respectfully submitted

GEORGE H SIMMONS Secretary

Dr L Duncan Bulkley read the report of the General Executive Committee

Report of General Executive Committee

The General Executive Committee held its first session of this meeting yesterday afternoon and considered carefully the program for 1901 in reference to the various regulations concerning it which had been passed at last meeting of the Association, and beg to report as follows

In former years it has been noted that the number of papers was largely in excess of what was right and necessary and by resolution of the Association directed that the number be considerably reduced, to perhaps not over 35 in each Section This has been measurably well accomplished and the total number of papers on the program this year is 391 as against 491 last year, and 615 in 1898, the highest number reached The largest number in any section this year is in that of Practice of Medicine, 43 papers

The committee beg however to call the attention of the Association to the fact that the regulation adopted some years ago and reinforced last year, providing for abstracts of papers for the program, has not been carried out to any great extent, and submits the following figures Of the total number, 391 papers, there were abstracts printed of only 196, while 205, or the majority of them, had no abstracts printed The committee recommends for adoption by the Association, the following resolutions

Resolved, That hereafter no titles of papers be printed in the program unless the required abstract is furnished and printed in connection with the same

Resolved, That the Secretary of the Association prepare and issue to all the chairmen and secretaries of Sections, printed slips containing the rules and regulations in regard to the length of papers, their abstracts, and also some printed matter which can be sent by the officers of sections to those desiring to read papers, that they may be fully informed of the rules of the Association in advance

The committee have to report that, in accordance with instructions, they arranged with Dr Flexner, of Philadelphia, to give a pathologic lecture on Wednesday evening illustrated with lantern slides At the very last moment a telegram came from Dr Flexner saying that he was unable to carry out his proposed plans and the committee have only to regret that the notice was received too late for them to substitute another essayist The committee therefore announce that the pathologic lecture, as stated on the program for Wednesday evening, will not be given

The committee desires to call attention to the absence from the program of the rule governing the submission of abstracts for publication, and also that requiring the Sections to adjourn during sessions of the General Association

L DUNCAN BULKLEY, Secretary

Inasmuch as this report contained several items, each item was considered separately and adopted

It was then moved that the report be adopted as a whole which was seconded and carried

The President announced as the next thing in order the joint report of the Treasurer and the Board of Trustees, which was read by Dr T J Happel, Tennessee

Report of Board of Trustees

Report of the Board of Trustees of THE AMERICAN MEDICAL ASSOCIATION, made at St Paul, Minn, June 4, 1901

To the Officers and Members of the American Medical Association

As required by our Constitution and By Laws, your Board of Trustees begs leave to submit the following report We desire, however, before entering upon the report, to state that heretofore it has been customary for the Treasurer to submit his report direct to your body, but under our laws, it is made the duty of your Board of Trustees to "annually audit and authenticate his accounts and present a statement of the same in its annual report to the ASSOCIATION" This duty we have performed and in our JOURNAL report, that of the Treasurer is included The combination of the two reports in one prevents confusion and repetition, inasmuch as the receipts of the ASSOCIATION are represented by the two accounts jointly, the Treasurer receiving and receipting for membership fees, and the interest on investments, whilst the JOURNAL receipts for all subscriptions, advertisement sales etc

We would add further that all of the accounts of the Treasurer and THE JOURNAL office have been carefully scrutinized by expert accountants, and certified to as all correct in every respect

REPORT OF TRUSTEES OF JOURNAL A M A, FOR YEAR ENDING DEC 31, 1900

Your JOURNAL business shows for the year 1900 as follows

1900	Debits
Jan 1—Cash on hand Treasurer's office	$13,556 36
Jan 1—Cash on hand, Journal office	799 15
Loans repaid during year 1900	3,163 50
Membership fees for year 1900	40,110 00
Registration fees Atlantic City	6,150 00
Interest on bonds, U S	525 00
Advertisements	44,060 70
Subscription	17,618 94
Reprints	2,525 18
Section reprints	405 70
Buttons	568 6[illegible]
Sales	558 93
Jobbing	1,492 00
Postage	12 70
P Marvel	239 27
Chicago Pathological Society	451 35
Electios	129 33
Sundries	169 11
Metal	23 85
Loss and gain	50 00
Pay roll refunded	5 51
American Academy Railway Surgery	162 00
General expense	10 22
	$131,787 4[illegible]

EXPENDITURES IN TREASURER'S OFFICE

	Credits
Mergenthaler Linotype Co Balance, two machines	$5,400 00
Linotype machine rent one year	550 00
Crocker Wheeler Motor for Journal office	225 00
Latham Machine Co, stitcher Journal office	223 25
Printing press for Journal office	2,925 00
Paper cutters for Journal office	325 00
Salary of clerk for Treasurer	300 00
H P Newman, Treasurer honorarium	1,000 00
Postage for Treasurer's office	540 00
Sundries for Treasurer's office	82 28
Premium on Treasurer's bond	100 00
Trustees' account, Chicago meeting	452 50
Trustees' account, Atlantic City meeting	844 35
Incidental expense of Trustee	25 20
Expenses of secretary of Trustee	36 70
W B Atkinson, salary and expense acct, Atlantic City	138 00
H P Newman, salary and expense acct	98 00
G H Simmons, Editor, Atlantic City	75 00
Stenographers, Atlantic City	1,113 63
E A Reilly expense registration, Atlantic City	280 25
R A Hamilton, services	52 12
B G Kalb, stenographer, Atlantic City	105 00
Extra services, Spec R R Agt Atlantic City	29 00
Philip Marvel, Chairman Committee Arrangements	370 42
Gold Medal Prize	85 00
Geo M Gould express on prize medal acct	2 70
Safety box rent	10 00
Expense account list of members for Journal	25 00
Expense, U O B Wingate	210 50
Expense account of Committee on National Legislation	226 20
Expense pathologic exhibit	246 53
Secretary's office (ledger)	7 00
Exchange on collections	49 00
Duplicate fees, Ret, Atlantic City	40 00
Total Treasurer's office	$16 192 67

EXPENDITURES IN JOURNAL OFFICE

Pay roll	$25 560 86
Salaries	11 788 33
Editorials reporting and news	6 775 13
Rent	1 500 00
Journal stock paper	25 192 07
Miscellaneous paper	1 430 26
Second class postage	5 616 06
Stamps	2 124 07
Stamped envelopes Committee Arrangements	233 20
General expense	2 381 53
Traveling expenses	388 90
Advertising and subscription commissions	4 956 79
Collection and exchange	181 28
Button account	735 86
Ink	1 069 80
Electros	994 03
Type	200 32
Electric power	740 15
Metal	183 83
Sundries	60 85
Accountant s charges	200 00
Press room and office furniture and fixtures	453 02
Book shop bindery (binding)	376 34
Bindery supplies	68 72
Smith Premier Typewriter Co	163 89
Shaw Walker Co	75 31
Sales	118 00
Section reprint express charges	47 99
American Medical Association express charges	46 43
C U Gordon P M deposit	60 00
Subscription account refunded	93 07
Reprint account refunded	9 25
Linotype appliances	57 49
Machinery supplies	546 57
Jobbing account refunded	50 00
Advertising account refunded	3 25
American Academy Surg reporting	60 00
Total expense Journal office	$94 542 65

Total expense Treasurer s office for year 1900	$16 192 63
Total expense Journal office	94 542 65
Aggregate	$110 735 28
1901	
Jan 1 —Cash in hand of Treasurer	$15 512 23
Jan 1 —Cash in hand of Journal office	5 539 94
Aggregate	$131 787 45
Jan 1 1899 cash bal on hand	$18 729 95—Treas
Jan 1 1900 cash bal on hand	13 566 56—Treas
Jan 1 1901 cash bal on hand	15 512 23—Treas
Jan 1 1899 cash bal on hand	$931 31—Journal
Jan 1 1900 cash bal on hand	799 15—Journal
Jan 1 1901 cash bal on hand	5 539 94—Journal
As compared with Jan. 1 1900 you have in your Treasurer s hands now a larger amount by	$1 945 87
And in the Journal office a larger amount by	4 740 79
Total	$6 686 66

But you have $3 000 00 less invested the Indianapolis loan having been repaid

Cash on hand is as follows

Jan 1 1901 invested in U S *bonds*	$10 812 50
Jan 1 1901 cash in Treasurer s office	15 512 23
Jan 1 1901 cash in Journal office	5 539 94
Total	$31 864 67
As compared with Jan 1 1900	28 168 01
Excess	$3 696 66

In addition to this you have paid out for machinery in the printing department as follows

Two Mergenthaler linotype machines	$5 400 00
One Mergenthaler linotype machine rent one year	550 00
One Crocker Wheeler motor	225 00
One Latham Machine Co stitcher	223 25
For printing press	2 925 00
For paper cutter	325 00
Total paid out for machinery	$9 648 25

There was estimated in the report of last year the cost of the press, $2,925 00, one stitcher, $223 25, one motor, $225 00 one linotype machine $3,100 00, total $6,473 25

Making an excess over estimate of 3 175 00

Now, in addition to this, we have bought a third linotype machine, paying cash down as one year's rent on the same $550 00

We owe a balance on this machine of 2550 00

Our paper account as well as all others has been paid for to date

If now you add to the excess of cash of the year 1900 over that of 1899 $3 696 66

the amount paid out for machinery during the year 1900 as shown above 9 648 25

You have your profit for 1900 $13 344 91

Your Board would report to you that we ordered enough money invested to make our investment when added to the $10,000 in United States bonds about equal to the sum of $25,000, par value We trust this will meet your approval To ward securing a permanent home for THE JOURNAL, you now have invested in gilt edged securities $25,000, which yearly grows by the interest at least

PLANT

We do not deem it necessary to give a detailed inventory of press room and proof room furniture and fixtures The additions to the same would fully balance wear and tear and would leave us with about the same valuation as last year, viz, $515

OFFICE FURNITURE AND FIXTURES

Can be disposed of in the same way, $1004 50

MACHINERY AND PLANT

In this department everything has been paid for except the third linotype machine, the account for which is not yet due The value of this department, not including the linotype machine, is $19,571 80

RECAPITULATION

The sum total of the items mentioned, viz, press room, proof room and office furniture and fixtures, and machinery and plant, less 5 per cent for wear and tear, after all additions, amounts to about $21,000 The office, with the addition of one or two small motors which your Editor was authorized to buy, is almost complete, and can now do all of its own work Its quarters are crowded, and for that reason some things can not be done to the best advantage

There has been a steady growth in THE JOURNAL An effort has been made by your Trustees and Editor to increase the quantity and quality of the reading matter in THE JOURNAL It should be the best medical journal published in the world With the support of a united profession it can be so made

Your Board of Trustees has endeavored also to carefully guard the advertising pages of THE JOURNAL Many advertisements have been refused, the quality of which were questionable The formulæ of all internal medicines have been demanded and as a rule published with the first insertion of each advertisement This rule has not been so rigidly applied to medicines for external use All medicines advertised in the newspapers for the benefit of the laity, have been refused space in THE JOURNAL A few contracts that had been made before such an order was passed had to be filled As a result of the adoption of this rule some medicines that were advertised direct to the laity have been withdrawn from the newspapers and now appear in medical journals alone

ADVERTISING DEPARTMENT

The following comparative statement indicates the increase in advertising collections during the past twelve months Collections for 1899 were $33,760 82, for 1900, $44,060 70, showing a gain of $10,299 88

Our advertising collections for 1898 were $23,629 71, thus indicating an increase of $20,430 99 nearly doubling our revenue from this source in two years

For the four weeks of January, 1901, THE JOURNAL carried over $1000 worth of advertising in each issue, and unless something unforeseen happens, there is no reason why this average should not be maintained throughout the year, making the revenue from advertising for 1901 considerably in excess of that of 1900

SUBSCRIPTION DEPARTMENT

The following figures indicate the gross issue of THE JOURNAL each week during 1900

Weekly Edition			*Weekly Edition*		
Jan 6	14 350		July 7	17 550	
Jan 13	14 350		July 14	17 600	
Jan 20	14 600		July 21	17 600	
Jan 27	14 600	57 900	July 28	17 525	70 275
Feb 3	14 600		Aug 4	17 550	
Feb 10	14 800		Aug 11	18 100	
Feb 17	15 200		Aug 18	18 100	
Feb 24	15 200	59 800	Aug 25	18 100	71 850
March 3	15 200		Sept 1	18 050	
March 10	16 125		Sept 8	18 350	
March 17	15 600		Sept 15	18 500	
March 24	15 700		Sept 22	18 680	
March 31	15 950	78 575	Sept 29	18 640	92 220

April 7	15,800		Oct 6	18,725	
April 14	16,550		Oct 13	19,090	
April 21	17,100		Oct 20	19,000	
April 28	16,300		Oct 27	19,200	
		65,750			76,015
May 5	16,150		Nov 3	19,250	
May 12	16,100		Nov 10	19,185	
May 19	27,000		Nov 17	19,230	
May 26	17,500		Nov 24	19,300	
		76,750			76,965
June 2	16,600		Dec 1	20,000	
June 9	17,100		Dec 8	20,100	
June 16	17,000		Dec 15	20,600	
June 23	17,000		Dec 22	20,650	
June 30	17,400		Dec 29	20,650	
		85,100			102,000
		423,875			483,325

	1900	1899
Grand total	907,200	710,750
Weekly average	17,446	13,672

The total number of copies issued during 1899 was 710,950, during 1900, 907,200, indicating an increase of 196,250, or 27 2/3 per cent The following indicates net gains and losses for twelve months ending Jan 1, 1901

STATE	Gain for the Year	Loss for the Year
Alabama	104	
Alaska	1	
Arizona	3	
Arkansas	24	
California	49	
Colorado	29	
Connecticut	86	
North Dakota	1	
South Dakota	10	
Delaware	11	
District of Columbia	60	
Florida	15	
Georgia	308	
Illinois	391	
Idaho	5	
Indian Territory	12	
Indiana	199	
Iowa	224	
Kansas	122	
Kentucky	69	
Louisiana	69	
Maine		17
Maryland	146	
Massachusetts	81	
Michigan	141	
Minnesota	53	
Missouri	228	
Mississippi	17	
Montana	10	
Nebraska	97	
New Mexico	5	
Nevada	2	
New Hampshire	32	
New Jersey	229	
New York	530	
North Carolina	69	
Ohio	122	
Oklahoma Territory	35	
Oregon	13	
Pennsylvania	535	
Rhode Island	10	
South Carolina	99	
Tennessee	293	
Texas	101	
Utah	11	
Vermont	7	
Virginia	154	
Washington	30	
Wyoming	10	
West Virginia	16	
Wisconsin	133	
U S Army	78	
U S Marine Hospital		
Canada	9	
Cuba		3
Hawaiian Islands	2	
Mexico	6	
Philippine Islands	11	
Porto Rico	7	
Foreign	8	
	5122	20

The figures given below indicate the count of the mailing list Jan 1, 1901, as compared with that of Jan 1, 1900

	Jan 1, 1900	Jan 1 1901
Copies to members	8445	9841
Copies to subscribers	4623	8339
Copies to advertisers	233	306
Copies to exchanges (domestic)	153	149
Copies to exchanges (foreign)	59	49
Copies to med colleges and libraries	108	113
Copies to subscription agents	4	45
	13,635	18,842

This indicates an increase of 5207, of which 5102 are new members and subscribers This is nearly double the increase of 1899 over 1898, the increase in members and subscribers in 1899 being 2,628

The following is a comparative statement of the net subscription collections for the years of 1899 and 1900

	1899	1900
January	$1,094 46	$3,614 08
February	525 25	1,167 24
March	952 76	1 388 89
April	741 27	1,719 06
May	669 93	1 585 90
June	733 05	1,334 75
July	1,851 73	3,456 42
August	1,208 38	1,246 03
September	798 36	1,273 91
October	1,313 20	3,285 49
November	920 71	1,748 12
December	1,474 42	1,872 14
	$12,283 52	$23,697 03
Indicating an increase of		$11,408 51

Our subscription collection for January, 1901, were $4,862 74, which is $1 248 66 more than that for January, 1900

THE JOURNAL has made an effort to improve in the quality of reading matter How well it has succeeded you must judge The figures presented in the first part of this report show that as a matter of financial policy it has been a success As the number of readers of THE JOURNAL increases, it becomes more and more valuable as a medium of medical advertising, and the increase in revenue from that source shows that advertisers are not slow to appreciate that fact

The Board of Trustees would also call attention to the fact that the frequent changes made in the program of the work of the Sections, all of which work is done in THE JOURNAL office, adds much to the expenses incident to printing of the JOURNAL Your Board has deemed it best to instruct the Editor to make no changes in the program after May 4 of each year It is suggested also that too many papers are on the programs of some of the Sections, and many of them are read only by title, and yet they must be treated and published, as if read and discussed by the Section Your Board would suggest that such papers should be treated as volunteer papers Especially should this apply when more than one paper is furnished by the same author at any annual meeting In arranging the programs of the work of the different Sections your Board would suggest that the secretaries give preference to those who write for only one Section, over those who have furnished, or propose to furnish, papers for two or more Sections This will limit the number of papers, and will tend to improve the quality This course will become a necessity in view of the increased number of Sections, and the fact that each Section will be furnished a reporter so that all discussions can be reported in full Under an order from your Board of Trustees, all stenographers will be employed by the Editor, to enable him to control all papers and abstracts of the same Your Board having directed an enforcement of Section 7 of the By laws, in regard to the publication of papers, no paper will be published in THE JOURNAL which has appeared in full or in abstract form in any other journal, and no stenographer will be re employed who furnishes any such abstract to any other journal

Unless some curtailment of the number of papers to be published in THE JOURNAL can be obtained along the lines just suggested, the publication of many valuable papers read at our annual meetings must of necessity be delayed for nearly a whole year, a thing pleasant neither to the writer nor Editor The ASSOCIATION might come to the relief of the Editor by limiting by by law or otherwise the number of papers in each Section to thirty-five If this is done, and the papers not read are ordered treated as volunteer papers, then much more room can be gotten in THE JOURNAL for papers from some of the best medical men in this country

In order to still further improve the quality of the material, to eliminate as far as possible all that would be of little value to our readers and to fix the responsibility for all that is admitted to the pages of THE JOURNAL, your Trustees suggest that hereafter no paper presented to any section shall be printed until it has received the approval of the three members of the Executive Committee from that section, evidenced by their signatures to said paper

INCREASED EXPENSES

A glance at the credit side of your financial exhibit will show that with the increase in your circulation there has been a pro rata increase in certain expenses connected with your JOURNAL The paper bill for the year 1900 was $2,874 23 more than during 1899 and second class postage $1704 41 more, and ink $427 01 more, making an increase in these three items alone of $5005 65 It is not necessary to enumerate other items These are presented as object lessons

We have referred to a few of the many sources of unnecessary expenses connected with the publication of our JOURNAL Many of them could be avoided, if all Section officers, as well as ASSOCIATION officers, would make it a rule in future to comply with the letter of our Constitution and By laws Let all papers not considered worthy to appear in THE JOURNAL be passed upon and rejected by the Section officers, and not throw the burden of this responsibility upon the Editor or the Publication Committee of the Board of Trustees Let the number of papers be limited to thirty five to the Section and let no changes be made in the programs of the Sections after May 4

We present you this report in printed form, gotten out in our JOURNAL office so as to have it ready for distribution to each member of the ASSOCIATION as he registers at our annual meeting We trust that the work of your Board will meet your approval In closing this report, we feel that we can present THE JOURNAL to you at the close of business at the end of the fiscal year Dec 31 1900, as no longer an experiment in medical journalism, but as an assured success—a journal of which the ASSOCIATION may well be proud

Respectfully submitted

A GARCELON, President,
H L E JOHNSON, Secretary
E E MONTGOMERY,
I N LOVE,
JOSEPH M MATHEWS,
E FLETCHER INGALS,
MILES F PORTER,
W L RODMAN,
I J HAPPEL,
Board of Trustees

On motion of Dr Tuckerman, Ohio, the joint report of the Treasurer and Board of Trustees, with the recommendations contained therein was adopted

Dr Bishop, Pennsylvania, moved that the Board of Trustees and the Editor of THE JOURNAL be extended a vote of thanks for their valuable and efficient services, which was unanimously carried

The President announced as the committee to secure portraits of ex presidents and living presidents, Drs J R Pennington, of Illinois W L Rodman, of Pennsylvania, and N P Dandridge, of Ohio He also suggested in this connection that at present the Association had no appropriate depository for the excellent work of art which had been presented, and that it would be well for the committee to make arrangements to deposit this portrait of Dr Davis in some art gallery until such time as the association would be able to provide quarters for its own art treasures

The next thing in order was the report of the Committee on National Legislation which was read by the Chairman of the Committee, Dr H L E Johnson, of Washington, D C

Committee on National Legislation

Second Annual Report of the Committee of the American Medical Association on National Legislation, presented to the St. Paul Meeting June 4, 1901

WASHINGTON, D C, June 4, 1901

To the President and Members of the American Medical Association

Gentlemen —We have the honor to report that at the last meeting of your Association, the constitution and by laws were amended so as to provide for a standing committee known as the committee on National Legislation, said committee to be appointed annually by the President In conformity with this, your honorable President appointed the following named gentlemen to constitute that committee Drs William L Rodman, of Philadelphia, William H Welch, of Baltimore, and H L E Johnson, of Washington, D C, who had served in this capacity during the past year, and reported to the Association at the meeting at Atlantic City their work during the year with the recommendations, and the minutes of the annual conference held at Washington, D C, with the delegates from the state societies, and the army and navy marine hospital services Their proceedings and recommendations were favorably reported upon by your General Executive Committee, and subsequently approved by the American Medical Association in general session

We are pleased to report that as a result of the combined efforts of your committee and the delegates to the annual conference, the obnoxious Senate Bill No 34 entitled, "For the further Prevention of Cruelty to Animals in the District of Columbia," known as the "Antivivisection Bill," has been defeated, and rendered practically impossible of passage in the future As a result of the second annual conference held at Washington, Feb 20 and 21, 1901, we have the honor to report the passage of Senate Bill No 4171, entitled, "An Act Granting Additional Quarantine Powers and Imposing Additional Duty upon the Marine Hospital Service," and the defeat of Section 150 H R Bill 13 423, "The Codification of Postal Laws" This section, if it had become a law, would have cost the American Medical Association about $30 000 extra in postage in connection with the distribution of THE JOURNAL to our members and subscribers We observe with great satisfaction and hope for future national influence of the American Medical Association, and the Committee on National Legislation, that the medical societies of the several states and territories are beginning to appreciate the importance of the annual conference, and the necessity of state co operation in matters of medical legislation both local and national, as evidenced by the increased attendance at the second annual conference which was held at Washington D C, in February last, at which conference the delegates in session appointed the standing committee of the second annual conference with full power to represent them, and act, *ad interim*, in all medical matters arising in the Congress of the United States Two special matters were thoroughly discussed in their various phases, and received the unanimous approval of your committee and the conference The first dealt with the unification of medical practice acts in the several states and territories, and showed a consensus of opinion that medical education and requirements should be raised to a given standard said standard being adopted by the several states, thereby permitting mutual acceptance of medical licenses to practice To this end the following resolution of Dr John B Roberts, of Philadelphia, was adopted

Resolved, That the chairman appoint a sub committee of three to study the question of uniform medical legislation on the basis of uniform medical education, and that this sub committee report at the next meeting of this conference

The chairman, Dr Johnson, appointed Drs Emil Amberg, of Detroit, Mich, Dudley S Reynolds, of Louisville, Ky, and John B Roberts, of Philadelphia, Pa The other matter, of probably greater magnitude, at least from a legislative point of view, was the importance and absolute necessity of state medical organization in connection with the American Medical Association, through your Committee on National Legislation The universal opinion of the delegates in conference was that the medical societies should be thoroughly organized throughout each State and have a principal representative through whom the entire regular profession of the state should be brought promptly in touch with your Committee on National Legislation, the American Medical Association, the National Congress, or a State Legislature whenever necessity requires To this end the following resolution of Dr William H Welch, of Baltimore, Md, was adopted

Resolved That the chairman of this conference send to each state society a communication, stating the character of the organization, and the purpose of this conference, advising each society to conform with the action of the American Medical Association requesting the appointment of two members, as delegate and alternate, a State Committee on National Legislation to represent the State Society in this conference, and to co operate with the National Committee Each state society is requested to send to the Chairman of the National Committee, the names and addresses of the delegate and alternate

To further carry out this important matter of state medical organization the following motion of Dr H M Bracken, of Minneapolis Minn was adopted *Moved*, That a committee of five with power to increase its number, be appointed by the chairman, to carry into effect state medical organization The Chairman, Dr Johnson, appointed Drs C R Shimault, of

Helena, Ark, W P Goff, of Clarksburg, W Va, L B Tuckerman, of Cleveland, Ohio, H M Bracken, of Minneapolis, Minn, and Charles E Quimby, of New York City, N Y

We quote and reiterate our recommendation of last year, and we can not urge too forcibly its importance in connection with the future efforts of your committee "Your committee is of the opinion that an annual conference at Washington, D C, to consider pending national and state medical legislation, is desirable, in that it will tend to awaken interest in national medical affairs and will give the state and national legislators a medium for better understanding the wishes of the country at large with respect to medical questions We recommend that the American Medical Association request affiliating medical societies of the several states and territories to provide in their constitutions for the appointment of a State Legislative Committee whose duty it shall be to consider all medical legislation arising in the state legislatures and in the national congress, and advise their constituent members thereof, further, the appointment of one member and an alternate to represent their society when called upon by your Committee on National Legislation to a general conference in Washington, each society paying out of its treasury the expenses of such delegate or alternate to said conference We suggest that such committee shall be carefully selected with respect to special individual qualifications for such service, and that the tenure of office shall depend upon individual fitness for the position"

We officially report that on Feb 20 and 21 of this year, in accordance with the constitution of the American Medical Association, your Committee on National Legislation held an annual conference at Washington, D C, with the delegates from the medical societies of the various states, and the government services We submit herewith the transactions of said conference, and recommend that it be printed in full in THE JOURNAL We further recommend that the American Medical Association approve the several resolutions quoted and adopted by the second annual conference Very respectfully,

H L E JOHNSON, M D,
WILLIAM H WELCH, M D,
WILLIAM L RODMAN, M D,
Committee on National Legislation

Minutes of the Second Annual Conference of the Committee on National Legislation, Held at Washington, D C, February 20-21, 1901

The Committee on National Legislation had several meetings during the year, and the Chairman was instructed to send the following communication to the Secretary of the Medical Societies of each State and Territory of the United States, in accordance with the by-law of the American Medical Association

WASHINGTON, D C, December 28, 1900

MY DEAR DOCTOR

On behalf of the Committee on National Legislation of the American Medical Association, I earnestly request you to send, at your earliest opportunity, the names and addresses of the delegate and alternate who are to represent your State Medical Society at the annual conference at Washington, D C, this winter

When you furnish me the names I will notify them at once of the date of the proposed conference Please refer to the report of the last conference, which appears in the JOURNAL of June 16, 1900, page 1547, and the report of the Trustees, on page 1559, also the report of the General Executive Committee of the Association, on page 1561, JOURNAL of same date Respectfully,

H L E JOHNSON, M D,
Chairman

Subsequently, to those societies who did not respond, the following communications were sent

WASHINGTON, D C, January 23, 1901

MY DEAR DOCTOR

On behalf of the Committee on National Legislation of the American Medical Association, I earnestly request you to send, at your earliest opportunity the names and addresses of the delegate and alternate who are to represent your State Medical Society at the annual conference at Washington, subject to the call of the Association's Chairman

Please refer to the report of the last conference, which appears in the JOURNAL of June 16, 1900, page 1547, and report of the Trustees on page 1559, and also report of General Executive Committee on page 1561, JOURNAL of same date If your State Society has not appointed a delegate and alternate will you please urge upon the members the importance of so doing? Respectfully,

H L E JOHNSON, M D,
Chairman

WASHINGTON, D C, January 23, 1901

DEAR DOCTOR

As your Society has not sent the name of the delegate and alternate to the Annual Conference of the Committee on National Legislation of the American Medical Association which meets here on February 20 and 21, 1901, will you please send the enclosed to the proper appointing officer or Committee of your Society that it may promptly reach your delegate or alternate, when such appointment is made? Very truly yours

H L E JOHNSON, M D,
Chairman Committee on National Legislation

Following thereon a regular call for meeting was sent

WASHINGTON, D C, January 30, 1901

DEAR DOCTOR

The Committee on National Legislation of the American Medical Association hereby requests you to meet in annual conference at Washington, D C, on February 20 and 21, 1901, at 11 o clock a m at the Arlington hotel, to consider various medical matters now pending in the National Congress of the United States and any other medical matters of local interest to your Society

All the hotels of the city are crowded at this season of the year, but the proprietor of the Arlington Hotel, Mr Frank V Bennett, will provide for your room and comfort either there or at an annex on your arrival

Please notify me by mail promptly that you will be present at this conference I leave Washington on the 1st proximo to attend the third Pan American Medical Congress at Havana, Cuba, and expect to return to Washington by the 12th or 15th, at which dates any correspondence from you will be promptly answered

In case you cannot attend please forward this to your alternate

Very truly yours,
H L E JOHNSON, M D,
Chairman Committee on National Legislation

The conference was called to order by the Chairman, Dr H L E Johnson, of Washington, D C, at 11 20 a m, February 20, 1901 at the Arlington Hotel The minutes of the last conference were read and approved

PRESENT Dr Dudley S Reynolds, Louisville, Ky Dr Emil Amberg, Detroit, Mich, Dr Charles E Quimby, New York, N Y Dr H M Bracken Minneapolis Minn, Dr C S Rodman Waterbury, Conn, Dr W P Goff, Clarksburg, W Va, Dr L B Tuckerman, Cleveland, Ohio, Dr C R Shinault, Helena, Ark Dr U O B Wingate, Milwaukee Wis, Dr Walter Wyman, Surgeon General United States Marine Hospital Service, Dr Henry A Beaudoux, Fargo, N D, Dr H L E Johnson, Washington, D C Dr George S Armstrong, Spokane, Wash Dr John B Roberts, Philadelphia, Pa, Dr William H Welch, Baltimore, Maryland Dr J B Massie, Houston, Tex, Dr Wm L Rodman Philadelphia, Pa Dr George M Sternberg, Surgeon General, United States Army

The Chairman, Dr Johnson, announced that the medical societies of the following States had nominated delegates, but their representatives had not appeared Colorado, Florida, Indiana, Kansas, Maine, New Hampshire, Rhode Island, Tennessee, and that the medical societies of the following States had made no nominations to the conference Alabama, Arizona, California, Delaware, Georgia, Idaho, Illinois, Indian Territory, Iowa, Louisiana Mississippi Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico North Carolina Oklahoma Territory, Oregon, South Carolina, Utah, Vermont, Virginia, Wyoming The Massachusetts Medical Society sent the following communication declining to send a delegate, and voting to lay the matter upon the table

THE MASSACHUSETTS MEDICAL SOCIETY

ROXBURY, MASS, February 25, 1901

H L E JOHNSON, M D
Chairman Committee on National Legislation, American Medical Association

MY DEAR DOCTOR

In reply to your communication of 23d instant I would say that on or about the 7th instant I wrote to inform you that at a meeting of the Councillors of this Society, held on 6th instant, it was voted to lay on the table the matter of appointing a delegate to represent the Massachusetts Medical Society at the meeting of the Committee in Washington, D C Yours Respectfully,

F W GOSS,
Recording Secretary

The Chairman Dr Johnson, addressed the conference, stating the object of the call, and outlined the work of the Committee *ad interim*, stating that after the first conference adjourned the special committee consisting of Drs H L E Johnson, Washington, D C W P Goff, West Virginia H M Bracken, Minnesota, and L B Tuckerman, Ohio, as directed, drew up a preamble to the Senate and House of Representatives denouncing in positive terms, and urging against the passage of Senate Bill 34, known as the Antivivisection Bill, and had the same submitted to the Senate by the President *pro tempore*, Senator Frye The bill is practically dead We have heard nothing about it recently, and its former urgent supporters appear to have lost heart, at all events they are not pushing the matter

Many of those who signed the original petition for the passage of the bill, have concluded the measure was too radical We think the conference is to be congratulated upon its success in this particular Following the instruction of the last conference, your committee called upon the different committees of Congress, in the interest of the other measures, endorsed by you

The Chairman, Dr Johnson, presented the following resolution, which was proposed at the meeting of the American Medical Association, at Atlantic City, June 1900, and referred to the Committee on National Legislation which decided to refer it to you for your consideration

Resolved, That this Association heartily endorses the bill (H R 11019) now before Congress, providing that the rank pay and allowances of the Surgeon General of the United States Army shall be that of a Major General of the United States Army, and that a committee of three be appointed by the President to assist in the securement of its passage

On motion this resolution was endorsed

J LAWTON MIERS, M D
I N LOVE, M D
JOSEPH M MATHEWS, M D

The Chairman stated that in December last the Committee on National Legislation was appealed to by many prominent physicians to co operate with them, in urging an amendment to Senate Bill 4300, known as "the Army Reorganization Bill" The amendment proposed was to section 18, and referred to the medical department of the Army

Your Committee saw the Chairman in charge of the matter in the House of Representatives, presented their objections to the measure, and later, arranged with the Chairman of the Senate Committee on

Military Affairs for a hearing This was promptly agreed to by the Chairman Senator Hawley but subsequently this hearing was positively refused, the Chairman of the Committee sending the following letter to your Chairman

UNITED STATES SENATE
COMMITTEE ON MILITARY AFFAIRS
CITY OF WASHINGTON December 15, 1900

Mr H L E JOHNSON Chairman
American Medical Association Washington D C

MY DEAR SIR

Personally I should be very glad to hear you as a representative of the Medical Association but the committee has determined to stop taking testimony because we have had a flood of it and we are anxious lest we shall be late in passing the reorganization bill and bring calamity upon our people in the Philippines Our good friend Surgeon General Sternberg has spoken to the committee and talked as long as he pleased I think the committee understands pretty well the real needs of the staff corps Yours very truly,

J R HAWLEY

Upon receipt of this your Chairman called upon several members of this Senate Committee objecting positively to their course in this matter and sent to the Chairman the following communication

WASHINGTON D C December 16 1900

Hon JAMES R HAWLEY Chairman
Senate Committee Military Affairs.

DEAR SIR

Your favor of the 15th instant in which you decline giving further public hearing in the matter of the Army bill S 4300, has been received and in reply thereto I beg to say

We the Committee on National Legislation which represents the American Medical Association and each State and Territory Medical Society of the United States do most respectfully, but earnestly disapprove section 18 of said bill as reported by the House of Representatives and request that the following be substituted therefor

SEC 18 That the Medical Department shall hereafter consist of one surgeon general with the rank of brigadier general ten surgeons with the rank of colonel twenty surgeons with the rank of lieutenant colonel eighty surgeons with the rank of major two hundred surgeons with the rank pay and allowances of first lieutenant of cavalry for the first five years service and with the rank pay and allowances of captain of cavalry after five years service the Hospital Corps as now authorized by law and the Nurse Corps *Provided* That all vacancies in the grade of colonel lieutenant colonel and major created or caused by this section shall be filled by promotion according to seniority subject to the examinations now prescribed by law and that all vacancies in the grade of surgeon with the rank of lieutenant shall be filled by selection after competitive examination *Provided* That the period during which any surgeon shall have served as a surgeon or assistant surgeon of volunteers or as a surgeon under contract since April twenty first eighteen hundred and ninety eight shall be counted as a portion of the five years service required to entitle him to the rank of captain but that after he attains the rank of captain his relative rank for subsequent promotion shall not be disturbed by anything herein That on and after the passage of this Act the President may appoint for duty in the Philippine Islands fifty surgeons of volunteers with the rank pay and allowances of major one hundred and fifty surgeons of volunteers with the rank pay and allowances of captain of cavalry *Provided*, That so many of these volunteer medical officers as are not required shall be honorably discharged from the service whenever in the opinion of the Secretary of War their services are no longer necessary and that the period for which they are appointed shall be limited to two years from the passage of this Act That on and after the passage of this Act the President may appoint contract surgeons who have rendered faithful and satisfactory services for a year or more to be surgeons of volunteers with the rank pay and allowances of first lieutenants of cavalry subject to honorable discharge whenever in the opinion of the Secretary of War their services are no longer required *Provided further* That all surgeons appointed shall be of good moral character and shall have passed a satisfactory professional and physical examination

This request is made in the interest of the Medical Department of the Army and the Civilian Medical profession of the United States As you find it impossible to grant us the audience promised we respectfully request that this communication be laid before your Honorable Committee for consideration

Very respectfully yours
H L E JOHNSON M D,
Chairman Committee on National Legislation
American Medical Association

Following the receipt of the above your Chairman was promptly invited to appear before the Committee on Military Affairs of the Senate and requested to explain the amendment suggested by your Committee After an hour s conference and argument with the Committee notwithstanding the fact that the matter had been practically closed in recognition of your wishes the amendment to section 18 proposed by your committee was referred to a special sub committee of their members for consideration who finally reported against the same In order to reinforce the position taken by your Committee your Chairman telegraphed the various members of the conference and THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION as follows

December 18 1900

Dr ———

As Legislative Delegate from your State Society wire at once Senator Hawley to vote for amendment to pending Senate Army Bill 4300 proposed by Committee on National Legislation

H L E JOHNSON M D Chairman

CHICAGO ILL., Dec 18 1900

EDITOR JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

The Committee on National Legislation has been in conference with the Military Committees of the Senate and House of Representatives considering the Army Reorganization Bill (S 4300) and has recommended a substitute for Medical Section 18, to meet the wishes of the civilian physicians of the United States and the Surgeon General of the Army The Committee on National Legislation appeals to every member of the American Medical Association requesting that he write or telegraph at once to both Chairmen Senator Hawley and Representative Hull urging them to vote for and favor the passage of the substitute proposed by your Committee The original bill is highly objectionable

H L E JOHNSON, M D
Chairman Committee on National Legislation

This situation made us thoroughly appreciate the absolute necessity of thorough organization in the various States We recommend a most thorough organization in the medical societies in the several States so that your committee *ad interim* will be enabled to call upon some duly appointed individual who will be able to bring the pressure of the entire medical profession of his State to act for or against, a measure in Congress when called upon by your committee Many letters were received in reply to the telegrams of your chairman, one of which, from Dr Black is herewith presented as it is in line with our suggestions

ILLINOIS STATE MEDICAL SOCIETY
JACKSONVILLE ILL, February 13 1901

H L E JOHNSON, M D Washington D C
Chairman Committee on National Legislation American Medical Association

DEAR DOCTOR

As Chairman of the Committee on Medical Legislation of the Illinois Medical Society I have been appointed to represent Illinois at the proposed meeting in Washington on the 20th and 21st of the present month

I regret to say that it will be impossible for me to attend this meeting without there should be some radical change in my arrangements In Illinois we are devoting our greatest energy towards organizing Whatever influence we may be able to exert on legislation must come by an organized effort

The Legislative Committee is using every means to secure a correct list of the members of all local societies in the State In Illinois our local societies comprise at least four thousand members We hope to soon have these men in a closer and more uniform organization and by that means will be able to bring far more influence to bear on National as well as State legislation Anything that I can do from this distance to forward the interests of your committee will be gladly undertaken

Regretting my probable inability to attend your meeting I am
Very respectfully

CARL E BLACK Chairman

It seems to me that this is the secret of the success of this Conference—thorough organization When you leave Washington and your committee we are willing at all times to come to the aid of the physicians of the various States but we must have some person appointed in each State to reach the various physicians in his individual State so that they can correspond with their Members and Senators expressing their wishes on a particular subject Medical legislation has often been proposed by laymen objectionable to the doctors and medical men comprising the cream of the profession have objected to the measures but no attention was paid to their wishes The other day when a question came up in Congress about a particular clause in a certain bill it was stated that Workingmen s Union No so and so had drawn the bill, through their attorneys and that it would undoubtedly pass It seems to your committee that our profession should be given some recognition If the members present will act on this and appoint some man in each State we can do more in the future With respect to the Army Bill Senate 4300 it has passed out of our hands and is now a law I want to call to your attention the article by Dr Amberg The Present Status of Interstate Reciprocity concerning licenses to practice medicine (*Medical News*, October 27, 1900) which is very important and shows a great deal of work and thought on his part

This practically sums up the work, *ad interim* with the exception that at the last Congress we acted on Senate Bill 4171 which is herewith presented

56th Congress
1st Session — S 4171 — Report No 1833

IN THE HOUSE OF REPRESENTATIVES

May 28, 1900

Referred to the Committee on Interstate and Foreign Commerce
May 29 1900

Referred to the House Calendar and ordered to be printed

AN ACT

To amend An Act granting additional quarantine powers and imposing additional duties upon the Marine Hospital Service approved February fifteenth eighteen hundred and ninety three

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled That an Act granting additional quarantine powers and imposing additional duties upon the Marine Hospital Service approved February fifteenth eighteen hundred and ninety three be amended by addition of the following sections

SEC 10 That the Supervising Surgeon General with the approval of the Secretary of the Treasury is authorized to designate and mark the boundaries of the quarantine grounds and quarantine anchorages for vessels which are reserved for use at each United States quarantine station and any vessel or officer of any vessels or other person other than State or municipal health or quarantine officers trespassing or otherwise entering upon such grounds or anchorages in disregard of the quarantine rules and regulations or without permission of the officer in charge of such station shall be deemed guilty of a misdemeanor and subject to arrest and upon conviction thereof be punished by a fine of not more than three hundred dollars or imprisonment for not more than one year or both in the discretion of the court Any master or owner of any vessel or any person violating any provision of this Act or any rule or regulation made in accordance with this Act relating to inspection of vessels or relating to the prevention of the introduction of contagious or infectious diseases or any master owner or agent of any vessel making a false statement relative to the sanitary condition of said vessel or its contents or as to the health of any passenger or person thereon shall be deemed guilty of a misdemeanor and subject to arrest and upon

conviction thereof be punished by a fine of not more than five hundred dollars or imprisonment for not more than one year, or both in the discretion of the court

SEC 11 That any vessel sailing from any foreign port without the bill of health required by section two of this Act, and arriving within the limits of any collection district of the United States, and not entering or attempting to enter any port of the United States, shall be subject to such quarantine measures as shall be prescribed by regulations of the Secretary of the Treasury, and the cost of such measures shall be a lien on said vessel, to be recovered by proceedings in the proper district court of the United States and in the manner set forth above as regards vessels from foreign ports without bills of health and entering any port of the United States

'SEC 12 That the medical officers of the United States, duly clothed with authority to act as quarantine officers at any port or place within the United States, and when performing the said duties, are hereby authorized to take declarations and administer oaths in matters pertaining to the administration of the quarantine laws and regulations of the United States"

Passed the Senate May 26, 1900

Attest CHARLES G BENNETT, Secretary

56th Congress, 1st Session HOUSE OF REPRESENTATIVES Report No 1833

GRANTING ADDITIONAL POWERS ETC, UPON MARINE HOSPITAL SERVICE

May 29, 1900—Referred to the House Calendar and ordered to be printed

Mr Corliss, from the Committee on Interstate and Foreign Commerce, submitted the following

REPORT

[To accompany S 4171]

The Committee on Interstate and Foreign Commerce, to whom was referred the bill (S 4171) to amend 'An act granting additional quarantine powers and imposing additional duties upon the Marine Hospital Service," approved February 15, 1893, beg leave to submit that this measure is necessary for the efficient performance of the duties devolving upon the Marine Hospital Service

We therefore recommend that the said bill do pass

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The Chairman, Dr JOHNSON continuing, said This bill is now on the verge of passage General Wyman will fully explain the features and necessity of this measure, and then we can close up the work, *ad interim*, and take up general matters by States

GENERAL WYMAN, U S Marine Hospital Service This bill was introduced in the Senate and House, and came up before the Senate Committee with some amendments and was by them reported favorably, and then it passed the Senate It then went over to the House Committee by whom it was reported favorably and placed on the Calendar On account of the shortness of time remaining of this session an effort was made to gain unanimous consent to have the bill passed in one of the morning hours There was no objection to the bill, but the gentleman who brought it up had inquired about it from one of the members who knew nothing about it, and he was a little tart in his reply, and in consequence he said 'I object ' This prevented it from being brought up at that time I have seen the Chairman of the Committee, and spoken to him of the importance of this bill and urged him to put it through I received a nice letter from him in reply, in which he said he would do so

It had been reported favorably to the House by the committee and the chairman of the committee has the privilege, by vote of the committee, to bring any matter up at the proper time whenever an opportunity is given to report bills Mr Hepburn said he would bring it up at the proper time Another way is under the suspension of the rules Last Monday was one of these days, and Mr Corliss made a report but the measure of the World's Fair at St Louis was up, and there was no time then to take up our matter Mr Corliss will watch it closely and pass it, because there will be no objection

The National Quarantine law passed in 1893 is a fine law, but the only penalty for a foreign ship leaving a port without a bill of health is through a court of law

If the master of the ship says there is no one sick and there is some one sick, we have no way of punishing him for it Heretofore we have been obliged to use the State quarantine laws for punishment, but we cannot do it as effectively under them as we could under our own The penalties are not excessive, but there should be some penalty which would cause the master and officers of vessels to respect the law The importance of it now lies in the fact that Congress passed laws granting additional quarantine powers to Hawaii and Porto Rico, and our own country should have the same, so that we may have some way of protecting ourselves from the introduction of contagious diseases These laws are made to apply in the Philippines and Cuba While the penalties might not be imposed, yet if we had the power of inflicting them it would be a great aid

Another feature is for the National quarantine officers to administer oaths Every State has this power, but we have not One other feature relates to the surveillance of vessels that may leave foreign countries, such as Cuba, and hover around our coast claiming they don't enter our ports, they come within the 3 mile limit and we have no way of preventing them They call themselves fishing smacks, and are often manned by new arrivals from Spain who are not immune They come to the Florida coast for the purpose of smuggling tobacco and rum and all we can do is to drive them off We purchased a swift yacht and cruised along the coast to ward them away from the 3 mile limit We have to put aboard a customs inspector This law empowers the Secretary to make such regulations as will keep the coast safe from such vessels and not allow them to put a sick man ashore, and charge all expense against the vessel, which we would seize and transport to the nearest quarantine station for disinfection, the vessel paying all expenses

Another feature of the bill is to make out the anchorage so that any intrusion may be punishable by a fine Infected vessels are placed within this anchorage, and should any vessel try to have communication with the infected ship we can drive them off or capture them This bill will give us the necessary authority to impose a fine upon them Everything is smooth, and the only thing now is to get it through The chairman of our committee and Mr Corliss are quite interested in it, but of course the time is getting short, but if the committee could interest the speaker and get him to recognize some one in the interest of this bill it will pass at once, and I think this can be done with some tact

DR TUCKERMAN, of Ohio, then moved that the special committee be authorized to represent to the members of the House Committee who have this bill in charge the urgent necessity of getting this bill through Seconded by Dr Goff, of West Virginia Carried

The Chairman, Dr JOHNSON, suggested that they individually bring this matter to the attention of their Senators and Members when they are seen this afternoon

The Chairman, Dr JOHNSON, said it might be well for the Conference to pass on the *ad interim* action of the committee

DR JOHN B ROBERTS, of Pennsylvania, moved that the Conference approve the action *ad interim* of the Legislative Committee of the AMERICAN MEDICAL ASSOCIATION and its subcommittee Seconded by General Wyman Carried

The Chairman, Dr JOHNSON, on behalf of the Medical Society of the District of Columbia, extended an invitation to the members of the Conference to attend its evening meeting

GENERAL WYMAN It has occurred to me since sitting here that it might interest you to come to the Bureau and Laboratory of the Marine Hospital Service It will give me great pleasure to have you attend

The Chairman, Dr JOHNSON then called the delegates by states for any matter they might wish to present the Conference

DR C R SHINAULT, of Arkansas, said he had nothing special to report

DR C S RODMAN, of Connecticut, had no business to introduce He said I may report from Connecticut that in consequence of the meeting here a year ago the Connecticut Medical Society introduced a recommendation to provide for reciprocity and, perhaps what is inseparable for a State Board, that a practitioner may have his license revoked on conviction of crime This was introduced in the Connecticut Legislature last week, and we hope to have it passed If so, it will be the result of your meeting last year From my own experience, a larger representation might be gotten here if the President of each State Society was notified and the matter brought to his attention

The Chairman DR JOHNSON, for the District of Columbia, said We have several matters pending the principal one is the reclamation of the Anacostia flats This is a disease-breeding spot which affects the health of those in the public schools, Insane Asylum, Navy Yard, Arsenal, and the entire southeastern section of this city Another matter is the water supply and filtration The Potomac water here is the worst in the United States We also have the bill, which has already been referred to, granting additional quarantine powers to the Marine Hospital Service, and I urge that this be considered All these things have been placed before the House and Senate and shifted from committee to committee because of our nonentity in Congress We have a foothold on the Rivers and Harbors Bill The water supply should be considered at once We have possibly more typhoid fever here than in any other city in the United States

DR DUDLEY S REYNOLDS, of Kentucky I had not the privilege of being with you last year I have learned a great deal since I came here, and I see now more fully the value of this committee and when I return home I will endeavor to present a synopsis of the work to our State Society in May in Louisville I know of nothing that Kentucky has to request

DR W H WELCH, of Maryland I was not instructed to bring any special matter before the Conference Apropos of your remarks Mr Chairman on organization, I might say that our Society has appointed two delegates to represent them in this Conference and it might be useful for this Conference to prepare a statement to be sent to each society to appoint two of their members who can be appealed to at any time

DR REYNOLDS, of Kentucky A great many State societies have no knowledge of this committee and its possibilities, and if a brief statement was prepared, giving the nature of the organization, it would do much good Not only should each society be requested to appoint two members as a committee, but it is also important that the chairman of this committee communicate with them Each society should also report at this Conference as to their legislative work and communicate with this Conference as to what they desire brought forward

GENERAL WYMAN Shall these two appointees be delegate and alternate?

DR WELCH, of Maryland Yes If they could not attend appoint a proxy, and bring this to the attention of each Society at their annual meeting

RESOLUTION OF DR WELCH

I move that the Chairman of this Committee send to each State Medical Society a communication stating the character of the organization and the purposes of this Conference and advising each Society to conform with the action of the AMERICAN MEDICAL ASSOCIATION, requesting the appointment of two members as a State committee on national legislation to represent the State Society in this Conference and to coöperate with the National Committee Each State Society is requested to send to the Chairman of the National Committee the names and addresses of the local committee

DR REYNOLDS, of Kentucky I would suggest that a subcommittee draft a report of the request

DR QUIMBY, of New York Would it not be better for the societies to comply with the regulation?

DR TUCKERMAN, of Ohio The necessity of doing it now rests on the fact that a number of State societies meet before the AMERICAN MEDICAL ASSOCIATION meeting and if they are communicated with now they will act this coming spring

DR REYNOLDS, of Kentucky The idea I have about this resolution is that it intends to notify these States which have not been informed that the AMERICAN MEDICAL ASSOCIATION invites each State Society to appoint a delegate and alternate

DR H M BRACKEN of Minnesota Mr Chairman who has provided for the alternate in the various States? In our State I was informed that no alternate was requested These matters can be made clear to us now

The Chairman DR JOHNSON submitted a copy of the letter sent to each Society and stated that each State and Territory Society had been communicated with both this and last year

The Chairman DR JOHNSON Dr Welch s resolution is in order

The resolution was stated and carried

DR EMIL AMBERG of Michigan I should like to bring up the subject of interstate reciprocity It appears to me that this subject is not entirely within the scope of this Committee because this has more to do with interstate legislation It is my opinion that the AMERICAN MEDICAL ASSOCIATION should appoint a special committee for this purpose This requires study of the preliminary and medical education and the laws of each State and I would therefore move that the AMERICAN MEDICAL ASSOCIATION not appreciating fully the importance of this movement at its last meeting the following resolution be adopted

WHEREAS The medical profession of the United States desires uniform medical legislation on the basis of uniform medical education and

WHEREAS The AMERICAN MEDICAL ASSOCIATION is the main representative of the medical profession of this country

I move that the Legislative Conference of the AMERICAN MEDICAL ASSOCIATION and affiliated societies recommend to the AMERICAN MEDICAL ASSOCIATION at its next meeting at St Paul that the Association appoint a committee of three which committee shall study the question of uniform medical legislation on the basis of uniform medical education and that this committee report at the meeting of the Association in 1902 and that the actual expenses of this committee not exceeding $600 for one year be paid by the Association

Seconded by Dr Shinault of Arkansas

DR JOHN B ROBERTS of Pennsylvania I think if any legislative work is to be done this Conference is the place and far better than creating another committee with other expenses to do the same work we are doing now

The Chairman DR. JOHNSON The matter of incurring extra expense to the AMERICAN MEDICAL ASSOCIATION would be referred to the Board of Trustees for approval We could appoint from this Conference a committee and present it to the AMERICAN MEDICAL ASSOCIATION for its approval

DR JOHN B ROBERTS of Pennsylvania offered the following amendment to Dr Amberg s resolution

Resolved That the Chairman appoint a sub committee of three to study the question of uniform medical legislation on the basis of uniform medical education and that this sub committee report at the next meeting of this Conference Dr Amberg accepts Dr Roberts amendment which on motion was carried

DR AMBERG of Michigan Something should be done on this matter at the next meeting of the AMERICAN MEDICAL ASSOCIATION

The Chairman DR JOHNSON In this matter we of the District of Columbia are annoyed We have Maryland on one side and Virginia on the other and we cannot practice in either place without examination nor can they come here to practice

DR REYNOLDS of Kentucky Dr Amberg is anxious for the AMERICAN MEDICAL ASSOCIATION to be heard throughout the country on this subject and it will be met entirely by the amendment offered by Dr Roberts What we do here we report at the next meeting at St Paul that goes into the minutes of the AMERICAN MEDICAL ASSOCIATION and if they approve of what we have done that is then the expression of the AMERICAN MEDICAL ASSOCIATION itself

The Chairman DR. JOHNSON The AMERICAN MEDICAL ASSOCIATION has already gone on record as requiring a four years course in medicine before one can become a member of the AMERICAN MEDICAL ASSOCIATION if they graduated after a certain date What we want is a uniform requirement in granting license

DR REYNOLDS of Kentucky Yesterday in this room there was a conference of the Association of American Medical Colleges this matter was considered and a conclusion reached which will give great impetus to the movement

DR AMBERG of Michigan moved as follows

I move that the Chairman of the Conference be instructed to inform in future all members of the committee at least two months in advance about the principal features which will come up for consideration at the meeting and which are known to him at that date and later on those which present themselves until the date of the meeting

Seconded by Dr H A Beaudoux of North Dakota

The Chairman DR. JOHNSON informed the Conference that the motion is unnecessary and unwise as certain important matters might come up after the notifications are sent out

Dr Amberg withdrew his motion

DR. H M BRACKEN of Minnesota had nothing at present to report The State Association is in sympathy with this work so far as it understands it Bearing on the action upon Dr Welch s resolution I spoke to him about it and his idea is that of a principal and alternate I think it should be so expressed in notifying each Society

The Chairman DR. JOHNSON Will Dr Welch please explain his resolution?

DR WELCH of Maryland One the delegate the other alternate

The Chairman DR. JOHNSON By unanimous consent the change is made in the resolution of Dr Welch

DR C E QUIMBY of New York I have no special report to make because this appointment was made rather suddenly There fore there is nothing to request in the direction of legislation from New York We have in New York the typical organization It is really Dr F H Wiggin to whom the credit is due for having put the association where it now stands The essence of that force lies in the basic principle of its organization which is absolute equality for every part of the State and the State Association is the County Association and these are the State Associations We have a council which is elected by the branches It is divided into district branches Of course there are a number of counties that have no association These apply to the district branches There is therefore a provision made for every man to be a member of the State Association and then the AMERICAN MEDICAL ASSOCIATION There is one delegate for every ten members These are the delegates to the AMERICAN MEDICAL ASSOCIATION This authority lies with the County Association The right of entrance is also decided by the County Association so that the men among whom he lives decide as to his fitness for membership The County Association Treasurer collects dues for his association The State Association fixes its dues and each County Association fixes its own The necessity of these district branches will not appear in any other State as in New York

The State Association was very slack for a time There were five associations when the new charter was granted Now these county associations are being formed at the rate of one a week I have heard of three in the last ten days It is spreading, and in New York they are rushing to come in out of the rain The candidates elected at each meeting number from 10 to 25 I think the most satisfactory part of the report is in its influence on members in showing them a unified body with the authority among themselves There has been nothing in New York within twenty years which has done as this has The only committees are an executive and a legislative committee The County Association rules on all legal matters of ethics The County Association committees are all made subordinate to the State Association So we are prepared to carry on organization We have all our committees ready and are a perfectly organized body, not only in numbers but in the character of the men who are coming in

DR H A BEAUDOUX of North Dakota had nothing to bring before this body We have troubles of our own in our State We have taken steps to close the back door and are doing it successfully We expect to succeed in bringing about clean medical practice in our State and stop magnetic institutions and quacks

DR C R SHINAULT of Arkansas When my name was called before I did not know what to say or what was wanted I had *no instructions from my society* We are in sympathy with this Conference and we want our medical law improved There is a bill before our Legislature now to that effect At present the only restriction we have is a board that is empowered to examine applicants and decide as to their abilities as practitioners There are several counties that do not have three graduates This bill calls for the appointment of two members from each Congressional district which will constitute the examining board and board of health We hope then to have better laws The board now passes any one who has weight as a voter

DR L B TUCKERMAN of Ohio We have in our State enforced the medical examination law for the first time and it has resulted in a very great thinning out of incompetents Nearly 30 per cent failed The State Board did not enforce its full requirements but we think it will next year The State Society endorsed fully the action of the Conference here There is one matter which concerns the AMERICAN MEDICAL ASSOCIATION, and it seems to me we might act on it here because during the next year if this proviso passes it will cost the AMERICAN MEDICAL ASSOCIATION to mail its journal about $30 000 There was a commission appointed to codify the postal laws and some things were added The daily papers have had it in for weekly papers for years They tried to shut out the weeklies but it was discovered in time and stopped In Section 150 of H R 13423 we find "that the rate of postage on newspapers and periodicals not exceeding two ounces in weight, when the same are deposited in a letter carrier office for delivery by its carriers shall be uniform at 1 cent each and periodicals weighing more than two ounces shall be subject, when delivered by such carriers to a postage of 2 cents each and these rates shall be fully prepaid by stamps affixed" If this proviso passes the AMERICAN MEDICAL ASSOCIATION will be obliged to affix a 2 cent stamp to each copy that goes to a subscriber If this were a necessity it would be all right but when the Government has to pay the railroads nearly four times as much per ton more than the express companies pay it is liable to shut out from the denizens of country districts all literary work because subscribers will be required to pay from $1 to $1 50 more per year I therefore move that we take immediate action in this matter

Seconded by DR. WELCH of Maryland

Carried

DR REYNOLDS of Kentucky I would suggest that Dr Tuckerman appear before the Senate Committee, and that he be authorized to use any expression as the sentiment of this body

The suggestion was approved

DR JOHN B ROBERTS of Pennsylvania We received the reports and adopted the suggestions of the AMERICAN MEDICAL ASSOCIATION We have nothing special to present but I feel sure that the want felt is some reciprocity clause The delegate from Arkansas (Dr Shinault) also says that this is desired We should give the right to practice to those who deserve it

DR. GEORGE S ARMSTRONG of Washington I have nothing to report We have a permanent committee on legislation and as soon as the legislators are elected we get the names of all members and the doctors who have a pull with them and when we want anything done we notify those doctors having a pull they interview the legislators and the bill passes Our Members and Senators will vote for anything we like

DR L B TUCKERMAN of Ohio I hope everyone here will see his Senators and Representatives before we go home and speak about the things we will act on here The committee will not have half the effect that the home doctor has

DR WILLIAM P GOFF of West Virginia I have no special subject to report Our State Society is thoroughly in sympathy with the Conference Our society appoints a delegate yearly but takes no further interest in the matter

DR U O B WINGATE of Wisconsin I have nothing to report except that our society is in thorough harmony with this Conference and that at its last meeting it amended its constitution to create a committee of one to meet with this Conference and also to consider reciprocity

GENERAL WYMAN U S Marine-Hospital Service I have nothing to report beyond what I have already said

DR. D S REYNOLDS of Kentucky This is a luxurious semi senatorial body We meet here at 11 o clock I have very important demands at home and wish to give my vote to Dr Tuckerman

before I leave the city I will address a communication to Senator Lindsay, of Kentucky, in reference to the postal law bill

DR L B TUCKERMAN, of Ohio I move that to morrow the first business will be the discussion of the details of the Army Bill and the matters which the Committee on National Legislation presented I would be glad if General Sternberg could go over the matter with us I want to give notice to Congress that a lay Secretary, who don't know a bacillus from a bedbug, has no business to sit down upon the medical profession in the way he has Seconded by Dr Beaudoux, of North Dakota Carried

DR D S REYNOLDS, of Kentucky I move that the Chairman of this Committee furnish each of the delegates to this conference with a copy of these proceedings within thirty days Seconded by Dr W P Goff, of West Virginia Carried

DR C S RODMAN, of Connecticut In the matter of sending of delegates, I have had a double experience, in securing a delegate and then coming myself I am satisfied that two or three things should be provided First, each state should be asked to pay the expenses of the delegate, and second, to select an alternate It would be much better, I think, for each delegate to select his own alternate The Society cannot depend on the alternate, if the delegate cannot attend I found it quite a task to get a man to come here for me I certainly think that the State Society should be asked to provide for an alternate, but that the delegate should select him and that the State Society should be asked to pay the expenses The President should be notified a month before the meeting of his State Society At the annual meeting of the Connecticut State Society held last May, I do not believe there was a man in attendance who was aware of the fact that the AMERICAN MEDICAL ASSOCIATION provides for the expenses of delegates Therefore I wish to emphasize it

The Chairman DR JOHNSON A copy of the transactions was sent to the delegate who represented your Society last year and was published in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION Consequently all concerned should have been thoroughly informed on these matters The AMERICAN MEDICAL ASSOCIATION does not provide for the expenses of State delegates—that is a mistake

DR H A BEAUDOUX, of North Dakota I move we accept the invitation of General Wyman for 9 o clock to morrow morning, and from there proceed here to meet at 11 o clock Motion carried

A motion to adjourn was made and carried

SECOND DAY, THURSDAY FEBRUARY 21, 1901

The Chairman DR JOHNSON called the meeting to order at 11 10 a m, and announced that the first order of business was the consideration of the law formerly known as Senate 4300, the Army Reorganization Bill

DR L B TUCKERMAN, of Ohio I went up yesterday to the document room of the House and Senate and tried to get the full history of the bill I got the bill as passed I have a few copies of these, but the things that were knocked out I haven't got I presume the best way to proceed would be for General Sternberg to explain to us about the things that got in that should not have and about the things that did not that should have been added

SURGEON GENERAL STERNBERG, U S Army In making my recommendation for an increased medical department I asked for one I thought we should have for the size of our army and this draft of my recommendation shows what I asked for I may say here that for an army of 100,000 men the surgeon general should have the rank of major general I shall be retired a year from next June, so I don t expect to get it but my successor undoubtedly will You can t get everything from Congress at once Instead of giving us ten assistant surgeons general with the rank of colonel, they gave us eight Instead of twenty deputy surgeons general, with rank of lieutenant colonel, they gave us ten Instead of giving us eighty surgeons with rank of major, they gave us sixty, and instead of two hundred assistant surgeons, with rank of captains and first lieutenants they gave us two hundred and forty They gave us forty more They gave us about the same number all the way through although they gave us more of the latter grade This is bad politics on the part of Congress and something the medical profession should stand up against a little later The fact is that the bill as passed has not done injustice to anyone It promoted two lieutenant colonels to be colonels, four majors to be lieutenant colonels, and it promoted fourteen captains to be majors, and promoted the men below them It did no injustice to anyone now in the service It appoints a larger number of assistant surgeons, who will not have the same opportunity for promotion It is these men who are coming in now who will suffer They will be captains in five years, that is the law But his promotion to a majority will be slow A man now gets to be a major in fifteen to eighteen years The man who comes in now will have to serve twenty five years or more before he attains his majority This should be corrected by legislation I presented the matter in the most forcible way to Congress, and we are on record as claiming this If Congress gives this to us, the medical corps will not have suffered Their estimate was for an army of 60,000 and not for the necessary estimate I prepared for the existing army of 100,000 men This bill includes two hundred officers to serve two years They would not give us the number of officers in the regular Army that I wanted I then made a special claim for two hundred officers of volunteers fifty as majors and one hundred and fifty captains This has passed, and it will help us out for two years At the end of these two years they go out because their time expires, and then we must have some additional legislation to increase the number of men in the regular army This then, is the time to strike for an increase in the corps before the men go out We must then again present the plea for more men in the higher grades We have really no reason to abuse Congress They have provided for our present needs They have also authorized the appointment of as many contract surgeons as I require I made an earnest effort to obtain volunteer commissions for the contract surgeons I urged that all contract surgeons who have rendered satisfactory service for one year should be commissioned but they did not put this in the bill So we have gotten nothing for our deserving contract surgeons We must still retain a great many contract surgeons in the service Whatever defects there are in the bill as passed don't really do any injustice to the present men of the corps and these defects can be remedied later So we must not urge additional legislation now, but in a year or two this matter should again be taken up Say at you next annual meeting it should be taken up by the profession There was great urgency to get this bill through If I had called upon the profession to block legislation until we could get what we wanted, it would have resulted in our getting nothing, so let it rest until later

DR L B TUCKERMAN, of Ohio I would inquire of the Surgeon General if by the next annual Conference there could be a bill prepared embodying what would be an ideal medical service in the Army

SURGEON GENERAL STERNBERG Yes, this could be done It could be best prepared in my office

DR L B TUCKERMAN, of Ohio I move that this Conference request the Surgeon General, as a member of this Conference to prepare a bill creating an ideal medical service, with the provision that the Surgeon General shall have the rank of Major General Seconded by Dr William L Rodman, of Pennsylvania Carried

SURGEON GENERAL STERNBERG, U S A I would like to add that I was not so greatly disappointed that Congress did not give us a larger medical corps for this reason If you have to get hastily three or four hundred additional men, you are not sure of getting the best, so, in the long run, it won't take long to fill the 130 vacancies which they have given us

The Chairman, DR JOHNSON In behalf of the Army Reorganization Bill, which is now known as Public No 30 approved February 2, 1901, I wish to say I appeared before the Senate Committee with the Surgeon General I presented the letter, a copy of which I had read here yesterday, making a request to them to grant us a hearing, and accept a substitute for Section 18 A hearing was given but they did not accept our suggestions I think, while it is very well to act on the advice of the Surgeon General, it behooves this Conference to stamp that bill as not in accord with the wishes of the medical profession at large We speak in behalf of the medical men of the country who differ from the men from West Point and Annapolis We present ourselves for medical appointment, thoroughly equipped to master the situation before us but this is ignored This Conference should go on record as disapproving the Senate s action in ignoring the wishes of the medical men of this country This will pave the way for a future consideration of this subject If deferred, it will come up later as new matter, before new men, who know nothing about its history This communication should be sent to the Chairman of the Military Committee of the House and Senate, and let them understand that we don t approve their action Notwithstanding the amount of work the Surgeon General and I had before this committee we and you have been ignored completely

Dr L B TUCKERMAN, of Ohio I move that the Chairman (Dr Johnson) and Dr Welch be empowered to draw up a suitable communication to Congress, stating our views on their ignoring the medical profession of the United States, and give them notice that they will hear from us later Seconded by Dr C S Rodman of Connecticut

The Chairman, Dr JOHNSON This will have more weight if drawn up by members from the States, because those of us who reside in the District have no vote let us all sign, and then it will have still more weight I think Dr Tuckerman would be the man to draw up the communication

Dr C E QUIMBY, of New York If this motion prevails I must oppose it on the grounds of politics I am not versed in politics but in New York we learn that when you are beaten, don t call the other man names The men on that committee were as sincere in doing their duty as we were in doing ours The Surgeon General says they have done us no injustice He also says, this matter can be remedied later It would be wiser for us to say to those men that at a future time we will be allowed to explain more clearly and that they will then agree with us I oppose the sending to any committee in Congress a communication condemning their action, because it did not agree with us

SURGEON GENERAL STERNBERG, U S A Our recommendations are a matter of record, and as a matter of fact, the resolutions would be pigeonholed, and it would do no good, even though it might be some satisfaction to us Let us be satisfied and take up the matter later de novo They are not sure in their own minds how many troops they must have in the Philippines If they provide it for 100,000 and the number required was only 50,000 they would have done an unwise thing They provide it for the immediate necessities, and I think it well to start in on the campaign now Moreover, when we are demanding legislation, this Conference should have its delegates on the spot to urge the matter, and present our views This Conference won't be able to accomplish any great results unless it gets at them from behind Each man should see his own Senator and Representative As a matter of practical politics it is hardly worth while to pass this resolution

Dr Tuckerman withdrew his motion

The Chairman, Dr JOHNSON This demonstrates the necessity of thorough organization in the States, so that we can come in contact with the radicals of the State Societies

SURGEON GENERAL STERNBERG, U S A I would like to say in this connection impressing upon all Congressmen and Senators the fact that medical men now have a very extensive education After graduating from some college, they have four years at a medical college, and at least one year at some hospital and these men cannot be induced to come into the Army without promotion

Senator Proctor says 'you get to be a first lieutenant right away and the West Point man is only a second lieutenant" The West Point man goes in there, when a mere boy, and has not such an extensive education I endeavored to bring this fact before the committee, but it had no weight with them The committee could not recommend more than they could pass We must educate the individual members of the committee to understand this, and I think we will get all we expect at some future time

The Chairman, Dr JOHNSON The next matter for consideration is the codification of the postal laws, as applied to our medical JOURNAL

Dr L B TUCKERMAN, of Ohio After adjournment yesterday I went to the Senate, with a letter to Senator Lindsay, of Kentucky from Dr Reynolds I pointed out to him the clause which related to medical journals, and other periodicals He took it to Senator Chandler, who said the bill would not go through with that proviso —we can be positively assured that it will not go through that way

Incidentally I want to emphasize the remarks of General Sternberg The only way to secure legislation is for each one of us to see our Senator and Representative personally We thought we were beaten in Ohio The osteopaths had secured by treating legislators wives the support of one of the members of the State Senate, and it looked as though he had a majority of the votes and he could bring it up at any time We called up his family physician who took the first train for his home They had lunch together during which they had a heart to heart talk He said to the legislator Thomas you want to go to Congress? If you bring up this bill there are eighteen votes against you Thomas dropped the bill The purpose of this organization is to get a firm grip on every Congressman s appendix I think if we carry it to the States and organize on the New York plan in five years we can bring from any district enough pressure to bear on each Congressman

Dr C R SHINAULT of Arkansas I saw Senator Berry and two Congressmen Senator Berry gave me his assurance that he would help us He was very submissive and he said he was at our mercy and would grant anything we wanted

Dr C E QUIMBY of New York I saw Senator Depew and had the Postal Bill in my hand and had gotten nearly through the formal greeting when he took the bill glanced at it and threw it down saying That will never pass

Dr EMIL AMBERG of Michigan I wish to say that Senator McMillan expressed himself in the same terms as Senator Depew with reference to the Postal Bill

GENERAL STERNBERG With reference to antivivisection legislation this has been killed for the present If it is ever revived we should protest against it

Dr L B TUCKERMAN of Ohio In reference to Senate Bill 4171 I saw my Representative and called his attention to the importance of it and telegraphed to my home and had them wire Chairman Hepburn to push it along This bill should pass this Congress as we may have an epidemic of yellow fever this summer

The Chairman Dr JOHNSON This bill has already passed the Senate and is waiting in the House for final action

SURGEON GENERAL WYMAN U S M H S There are two ways in which this bill can come up The chairman of the committee has the privilege of presenting to the House on his committee day such measure as he chooses and he assures me that he will get it through There is no objection to it on the part of anybody It can be put through when there is a call of committees There is a morning hour once a week on Mondays or on suspension day when a motion can be made to suspend the rules and put the bill through On this day the speaker must recognize some one who will move that this bill do pass On account of the St Louis World s Fair project Mr Corliss could not get recognition

Dr C E QUIMBY of New York What provision is made for watching recognizing and following bills of interest to the medical profession?

The Chairman Dr JOHNSON Our committee the Committee on National Legislation looks after all such bills

Dr JOHN B ROBERTS of Pennsylvania I should like to have some provision made for a permanent secretary to this committee

The Chairman Dr JOHNSON This is already provided for

The Chairman Dr JOHNSON Yesterday there was a resolution passed directing the Chairman to appoint a committee on uniform medical legislation etc The Chair appoints Drs Amberg Reynolds and Roberts

The Chairman Dr JOHNSON I think we would be very remiss if we did not appoint a Committee on State Organization This committee should devise some way of reaching the voters I would suggest that a committee of three be appointed for this purpose

Dr L B TUCKERMAN of Ohio Would it not be better to recommend that the American Medical Association appoint a committee for this purpose?

The Chairman Dr JOHNSON That would be very unwise The American Medical Association has done all it ought to do it has appointed a permanent committee on legislation and provided for an annual conference We should appoint some of our members to confer with the States so that they can discuss the matter in the various sections of the country

Dr H M BRACKEN of Minnesota I move that a committee of five with power to increase its number be appointed by the Chairman to carry into effect state medical organization Seconded by Dr H A Beaudoux, of North Dakota Carried

Dr H M BRACKEN of Minnesota What have we to do so far as appointing our chairman is concerned?

The Chairman Dr JOHNSON Nothing The appointment is provided for by the American Medical Association

Dr I B TUCKERMAN of Ohio I would move you that the committee of the American Medical Association on national legislation shall represent the annual legislative conference and shall act *ad interim* and that due notice of the meetings thereof shall be published in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION Seconded by Dr W P Goff of West Virginia Carried

The Chairman Dr JOHNSON The Committee on National Legislation is empowered to act *ad interim* for the American Medical Association It will now also act for the conference

Dr H A BEAUDOUX of North Dakota This committee of three is appointed for one year only therefore I move that it be appointed for all time to come for the reason that you are thoroughly conversant with the work

The Chairman Dr JOHNSON While we have worked faithfully last year and this we might not do so next year One cannot be lazy on this committee We have already served two years There is a large amount of work for this committee to do

Dr H A BEAUDOUX of North Dakota I move that this conference recommend to the American Medical Association a three year term for this committee instead of one Seconded by Dr L B Tuckerman of Ohio

The Chairman Dr JOHNSON This if proposed will lie over to be acted upon next year as it is an amendment to the Constitution

Dr W H WELCH of Maryland The American Medical Association appoints a number of committees This is the prerogative of the president I ask that we do not ask for a longer term than the law allows

Dr C E QUIMBY of New York It strikes me that if we let the matter rest we shall accomplish what we want and men by their good work will come forward We would have influence with the President and can call his attention to them

The Chairman, Dr JOHNSON When this matter comes up between the Trustees and Executive Committee and they wish to make the terms of this committee three years I shall oppose it for I believe a committee should not be foisted upon the American Medical Association for more than one year When a committee does good work the Association may want them to serve longer

Dr H M BRACKEN of Minnesota Let us leave it alone The committee shall be made up from Maryland, Pennsylvania and Washington D C

Dr WILLIAM L RODMAN of Pennsylvania As a member of this committee I think it should be left as it is now The President of the American Medical Association should appoint whom he desires

Dr H A Beaudoux of North Dakota withdrew his motion

Dr L B TUCKERMAN, of Ohio I move this conference appoint a committee of one to urge on Congress the immediate passage of S 4171 passed by the Senate and now pending in the House It should be passed at this session because the dangers from the loop holes in the present law will menace us materially before another Congress can meet Seconded by Dr C R Shinault of Arkansas Carried

The Chairman Dr JOHNSON appoints Dr I B Tuckerman of Ohio as this committee of one

Dr C R SHINAULT of Arkansas The Southern Congressmen as a rule are all favorable to the bill They realize that summer is coming and the country is in danger

The Chairman Dr JOHNSON I would suggest that all the members see their Senators and Representatives in the interest of this bill

Dr W P GOFF of West Virginia I think the committee on organization is a very important one The different State Societies appoint a number of delegates and take it as a matter of course If this matter of State organization is gotten at in the proper way it will make the State Societies treat this matter in a different manner Those who don t might not be in sympathy with this conference

Dr C E QUIMBY of New York Is it not possible to do this work in one day? We come here for business and not for pleasure and we can get to work early in the morning of the first day and have the afternoon for pleasure and in the evening another session and thus complete the work in one day

Dr L B TUCKERMAN of Ohio It seems to me that the present system is about as good as we can do We got together and cleared up the business yesterday went to Congress and came back and had a session to day and have now cleared up the balance of the business By putting in one more day those of us whom it takes more than one day to get here might not be able to accomplish our mission

Dr C R SHINAULT of Arkansas It will be time enough to consider this at our next meeting and then we will probably have to have more than two days on account of the length of business

The Chairman Dr JOHNSON When the two days session was decided upon by our committee it was arranged that during the first day of the session we would complete as much work as possible and go to Congress on the same day and close up all business on the following day We could have our meetings earlier in the morning I don t think it wise to have a one day conference We could not accomplish much

Dr H M BRACKEN of Minnesota If we had a night session we could not leave the city until the next morning Would it not be possible to have the meetings earlier in the season?

The Chairman Dr JOHNSON The object of having the meeting now was because the new session of Congress began in December and to call us together simply for the Army Bill would have been unwise so we decided to call it when it was deemed most advantageous The next Congress a long session will do much work in the summer and we might meet in December although we are empowered to meet but once in each year I think it will be wise to leave to the judgment of the committee when to call the next meeting It would be well for the delegates to send us word when they can most conveniently attend

Dr H M Bracken of Minnesota suggested the middle of January

Dr W P GOFF of West Virginia I move that a vote of thanks be extended to the Chairman for his great interest in this work

Seconded by Dr L B Tuckerman of Ohio

The Chairman Dr JOHNSON I had rather this be given to the committee We have labored equally

The motion was put and carried

The Chairman Dr JOHNSON The Chair appoints as the Committee on State Organization Dr C R Shinault of Helena Ark Dr W P Goff of Clarksburg W Va Dr L B Tuckerman of Cleveland Ohio Dr H M Bracken of Minneapolis Minn and Dr Chas E Quimby of New York City The committee has power to increase its number

On motion the conference adjourned to meet at the call of the Chairman

The following letter was presented by Dr Tuckerman to the chairman of the Committee on Interstate and Foreign Commerce in the House and National Quarantine and Public Health in the Senate and a personal interview obtained with each committee

WASHINGTON D C February 21 1901

At the annual meeting of the National Legislative Conference of the American Medical Association and Affiliated State Medical Societies held at the Arlington February 20 21 the following resolution was adopted and Dr L B Tuckerman of Cleveland Ohio was appointed a special committee to present the same to the committee of the House The resolution is as follows *Resolved* That this Conference urge the immediate passage of S 4171 which has already passed the Senate and is now pending in the House for the reason that the dangerous loopholes in the present quarantine law will occasion a serious menace to the public health before another Congress can meet Respectfully

H L E JOHNSON M D Chairman

The Chairman has the pleasure of congratulating the Conference and announcing the passage of bill S 4171 to amend an Act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service This bill is now a law and is known as Public No 141 approved March 3 1901

H L E JOHNSON M D Chairman

On motion of Dr Emil Mayer, New York, the report of the Committee on National Legislation was referred to the General Executive Committee

The President called for the reading of the report of the Committee on Reorganization, when Dr Connell, Pennsylvania, moved that the report be read by title and referred to the Nominating Committee Seconded It was then moved and seconded that the motion of Dr Connell be laid on the table, which was carried Dr McCormack then read the report of the Committee on Reorganization

Report of Committee on Reorganization

Officers and Members of The American Medical Association We, your Committee on Reorganization, respectfully submit the following

We have keenly felt from the first the magnitude of the task set for us but in all the months of exacting labor, we have been spurred on by the hope that our work would, if wisely performed, and if accepted by you, mark the dawn of a new era in the history of American medicine After full consideration of the problems before us we early reached the conclusion that it would be useless at this late date to suggest the adoption of either half way or compromise measures, and, therefore, we have prepared and now submit a completely revised Constitution and By Laws designed to federate all the state organizations into this Association, to foster scientific medicine, and to make the medical profession a power in the social and political life of the Republic

In a recent issue of THE JOURNAL we submitted for your consideration a full outline of the changes proposed and, in an exhaustive manner presented the reasons for our recommendations We earnestly request that every member of the Association shall, before passing judgment upon our work, carefully consider all the facts and arguments presented Such examination will make it clear that we have been conservative, suggesting only such changes in the organic laws as are essential to the accomplishment of the high purpose for which the Association was organized

It will be seen that we have left the Code of Ethics, based upon the original resolution of adoption, undisturbed and still in force We have carefully preserved the membership of all those now in the Association and have jealously guarded the rights and privileges of each state organization now in affiliation with this body

In accordance with your instructions we have also submitted to the larger Committee composed of one member from each state a detailed scheme for the organization or reorganization of state and county societies, in harmony with, and in completion of the general plan, in which we ask your concurrence

The various portions of the scheme of organization proposed are interdependent and should be permitted to stand or fall together During the time devoted to the preparation of the report, we have considered the various questions in detail, and have rejected many propositions that we at first thought worthy of adoption, so that we feel that no amendment can be proposed from the floor which has not already been fully considered We appreciate the fact that some of the details proposed are to a certain extent experimental, and their true value can only be determined by the test of experience

As all the changes outlined, and the reasons for them, have been fully placed before you no discussion of any part of them will be attempted here the Constitution and By Laws clear and distinct in every provision, being submitted as our unanimous report

Respectfully

J N McCORMACK,
P MAXWELL FOSHAY,
GEORGE H SIMMONS,
Committee on Reorganization

At its conclusion, Dr Harris, New York, speaking in behalf of the delegation of the New York State Medical Association, which had unanimously endorsed the general plan reported by the committee, offered the following resolution

Resolved, That the report of the Committee on Reorganization be referred to a Joint Committee composed of the General Executive Committee and the Enlarged Committee on Reorganization (representing as it does all the states), and that this Joint Committee meet at the rooms of the General Executive Committee, at the Hotel Ryan, during the afternoon and evening, to give a hearing to any member who desires to be heard on the subject of this report, and that this Joint Committee be requested to report to morrow morning

After presenting the resolution, he moved its adoption, which was seconded and carried

At this point some confusion arose as to what disposition had been made of the report

The President stated that the report had been referred to a joint committee composed of the General Executive Committee and the Enlarged Committee on Reorganization

Dr Baldy, Pennsylvania, moved a reconsideration of the action taken by the Association in referring the report to the General Executive Committee, etc This motion was seconded

Dr Harris, New York thereupon moved that the motion of Dr Baldy to reconsider be laid on the table, which was seconded and carried

Dr Baldy then stated that the Chair had no right, according to parliamentary law, to recognize a motion to table a motion of reconsideration, and he therefore appealed from the decision of the Chair

The Association sustained the Chair in his ruling

Dr Happel, Tennessee made the point that when a motion to table a motion to reconsider was made and carried, it prevented the Association from taking any further action upon the matter for that day, according to parliamentary law

This report was submitted to a committee composed of one representative from each State, Territory and Government Service at a meeting held at the Hotel Ryan, June 3, 1901

This committee, after regularly organizing, considered the Constitution and By Laws as submitted, section by section, and unanimously recommend it for adoption by this Association The following states were represented The names of their representatives are appended, and submitted herewith [The states and representatives are given on next page]

On motion, the Association adjourned until Wednesday

JUNE 5—SECOND GENERAL SESSION

The Association met at 11 a m, and was called to order by the President

The President introduced His Excellency, S R Van Sant, Governor of Minnesota, who welcomed the Association on behalf of the state

Address of the Governor

Mr President, Ladies and Gentlemen A welcome is none the less cordial because it is twenty four hours late Age improves some things, particularly in the medical profession I have been associated with doctors and have worn their badges from time to time, and I have attended their banquets, and I confess to you that I am pretty near out of ammunition I have said all of the good things I can say about your splendid profession I have for a long time been interested in the work of the medical profession I have done all I could for you and am ever willing to advance your interests I am not going to talk to you this morning about medicine I don't know any more about that subject than you do yourselves (Laughter)

We are somewhat proud of our University and of the medical profession of the great state of Minnesota You can scarcely realize what a great state you have come to This state is so large that it would take a great many states of the size of Rhode Island to fill it, and then there would be lots of territory left We have here great wheat fields, we grind the wheat into flour and feed the world We will send to other states 20,000,000 tons of iron ore, and will have enough left for the next 250 years

I would call your attention to the beautiful and peerless women we have in this state, also we have the bravest men that can be found anywhere, and I think you will agree with me on the first proposition before you leave our beautiful city and state

As I was entering the hall this morning, I noticed a reference to your next place of meeting The notice stated that the convention should go south in 1902 and the reasons for it were given I want to say a word or two along that line I was one of the members who opposed the Grand Army of the Republic going south in 1895 I thought it ought to go to a northern city, but I want to say to you, that I am glad now that the Grand Army of the Republic crossed the Ohio river

and met in the beautiful city of Louisville We received a cordial welcome to that city They received us with open arms and I never saw more patriotism to the square inch than in that city The old flag greeted us on every hand It was placed on public buildings, on churches and private residences, and the word "Welcome" was written everywhere I shall never forget the sight I saw under the glare of the electric lights of the red, white and blue There was one sign which pleased me very much It was written in very large letters over the jail, "Welcome" (Laughter) I want to say to you that when we heard that you were going to meet in St Paul we tore our jail down (laughter), and we can not give you a welcome in that place, and we don't want to do so

Here the governor spoke of the beauties of the south and referred to the monuments that were erected to distinguished men He concluded his remarks by saying "I sometimes think doctors have special privileges This is hardly fair in a republic like ours For instance, if I treat you, I pay the bill If the doctor treats me or my family, I pay the bill still (Laughter) I do not know whether it is a good wish to make to a body of doctors or not but it is a good thing for a lot of politicians That wish is this "I don't know what you want but I hope you will all get it" (Applause)

Following the address of welcome by the governor the minutes of the previous general session were approved as read

The next order was the report of the Joint Committee, consisting of the General Executive Committee and the Committee on Organization upon the report of the Committee on Reorganization This report was read by the Chairman of the Joint Committee, Dr H O Walker, Michigan

Report of the Transactions of the Reorganization Committee on Revision of Constitution and By Laws

The Committee on Organization of the Constitution and By Laws of the American Medical Association met in Parlor Four of the Hotel Ryan, St Paul Minn at 11 a m June 3, 1901, and were called to order by Dr McCormack, of Kentucky, Chairman of the Special Committee on Reorganization Dr G N Kreider, of Illinois was elected chairman, and Dr H M McClanahan of Nebraska elected Secretary On request of the Chairman Dr McCormack stated the object of the meeting was set forth in the following resolutions passed at the 1900 meeting of the American Medical Association

Resolved That a committee be appointed by the Association on the organization of the profession throughout the United States to cooperate with the Committee on National Legislation this Committee to consist of one member from each State and Territory represented in the Association

Resolved, That a committee of three be appointed by the President to prepare plans in detail for such Committee on Organization, to enter into correspondence with the officers of the various State societies and take such action in the premises as it may think advisable and that the Trustees be requested to appropriate a sum not exceeding $150 for the necessary expenses of the Committee

After briefly calling attention to many of the inconsistencies and the cumbersome condition of the present constitution, he submitted for the consideration of the members of the Organization Committee a printed copy of the results of the Special Committee on Reorganization and asked its indulgence in giving a careful examination It was moved and seconded that the report of the Special Committee on Reorganization be accepted for consideration, which was carried, and a copy placed in the hands of its members On motion of Dr R E Conniff of Iowa, the meeting then adjourned until 2 p m

PARLOR 4, HOTEL RYAN, ST PAUL, MINN, JUNE 3, 1901

The Committee on Organization was called to order by the Chairman and in the absence of its Secretary, Dr R Harvey Reed, of Wyoming, was elected Secretary and, in pursuance of its action at the morning session, the Committee on Organization proceeded to consider the proposed Constitution and By Laws section by section After a full consideration of each section, the following proposed Constitution and By Laws were unanimously adopted, section at a time, then adopted as a whole after which they were duly signed by the members present or their authorized proxies There being no other business before the Committee, a motion to adjourn was carried

R HARVEY REED Secretary

Approved GEO N KREIDER, Chairman

We, the undersigned, have examined and hereby indorse and approve of the revised constitution for the American Medical Association

Drs G W Harrison Alabama, J A Dibrell Arkansas, John L Wills, California, W W Grant, Colorado, G A Shelton, Connecticut, John Palmer, Jr, Delaware, Wm N Fisher, District of Columbia, G N Kreider, Illinois, G W McCaskey, Indiana, R F Conniff, Iowa, Joseph M Mathews, Kentucky, Alonzo Garcelon, Maine, H O Marcy, Massachusetts, A W Alvord, Michigan, J N Griffith, Missouri, H M McClanahan, Nebraska, H D Didima, New York, Geo Cook, New Hampshire, Philip Marvel, New Jersey, John A Wyeth, New York W T Means, Ohio, J A Crook, Tennessee, J W Aird Utah, G T Vaughn, U S Marine Hospital Service, Charles Richard, U S Army, T L Catterson, Washington, A H Thayer, West Virginia, J H Pritchard, Wisconsin, R Harvey Reed, Wyoming

Constitution

ARTICLE I—TITLE OF THE ASSOCIATION

The name and title of this organization shall be THE AMERICAN MEDICAL ASSOCIATION

ARTICLE II—OBJECT OF THE ASSOCIATION

The object of this Association shall be to federate into one compact organization the medical profession of the United States, for the purpose of fostering the growth and diffusion of medical knowledge, of promoting friendly intercourse among American physicians, of safeguarding the material interests of the medical profession of elevating the standard of medical education, of securing the enactment and enforcement of medical laws, of enlightening and directing public opinion in regard to the broad problems of state medicine, and of representing to the world the practical accomplishments of scientific medicine

ARTICLE III—COMPOSITION OF THE ASSOCIATION

SECTION 1—This Association shall consist of Delegates, Permanent Members, Members by Invitation, Honorary Members, and Associate Members

SEC 2 *Permanent Members*—Permanent members shall consist of such members of the state societies, together with their affiliated local societies, entitled to representation in this Association as shall make application for admission, in writing to the Treasurer, and accompany said application with a certificate of good standing signed by the president and secretary of the society of which they are members, and the annual fee

SEC 3 *Members by Invitation*—Members by invitation shall consist of distinguished physicians of foreign countries who may be invited by the officers of Sections or of the Association They shall hold their connection with this Association until the close of the annual session to which they are invited and shall be entitled to participate in all of its affairs, as in the case of permanent members, but they shall not be assessed the annual dues

SEC 4 *Honorary Members*—Honorary members shall be physicians of foreign countries who have risen to pre eminence in the profession of medicine

SEC 5 *Associate Members*—Representative teachers and students of the allied sciences not physicians may become associate members by the vote of the House of Delegates

ARTICLE IV—HOUSE OF DELEGATES

SECTION 1—The House of Delegates of the AMERICAN MEDICAL ASSOCIATION shall consist of (1) delegates elected by permanently organized state and territorial medical societies in affiliation with this Association, (2) two delegates elected by each of the component Sections of this Association, (3) one delegate each from the medical departments of the U S Army and U S Navy and one from the U S Marine Hospital Service

SEC 2—The total membership of the House of Delegates shall not exceed 150, and the delegates representing the state societies shall be apportioned among the several affiliated state and territorial medical organizations in direct ratio to their true membership

ARTICLE V—SECTIONS

In order that its appropriate scientific work may be expeditiously and systematically performed this Association shall be divided into Sections each of which shall be devoted to the encouragement and pursuit of knowledge in one of the recognized branches into which the science and art of medicine are for convenience divided New Sections may be organized from time to time as the necessity for their existence arises

ARTICLE VI—BRANCHES

The House of Delegates shall have authority to provide for and create such branch organizations as may be deemed essential to the promotion of the welfare of the medical profession

ARTICLE VII—MEETINGS

The regular meetings of the Association shall be held annually The place of meeting shall be determined, with the time of meeting for each next successive year, by vote of the House of Delegates

ARTICLE VIII—OFFICERS

SECTION 1—The officers of this Association shall be a President, four Vice Presidents, a Secretary, a Treasurer, and nine Trustees

SEC 2—The officers of this Association shall be elected by the House of Delegates

SEC 3—Each officer, with the exception of the Secretary and the Board of Trustees, shall hold office for one year or until his successor is elected and installed Three trustees shall be elected annually by the House of Delegates for a term of three years

SEC 4—No member of the House of Delegates shall be eligible to any of the offices mentioned in the foregoing sections of this article

ARTICLE IX—FUNDS AND APPROPRIATIONS

Funds for meeting its current expenses and awards from year to year shall be raised by the Association by an equal assessment of not more than ten dollars annually on each of the permanent members, by voluntary contributions for specific objects, and from the profits of its publications Funds may be appropriated by the House of Delegates in accordance with the articles of incorporation for defraying the expenses of its annual meetings, for publication, for enabling standing committees to fulfil their respective duties, conduct their correspondence, and procure materials necessary for the completion of their stated annual reports, for the encouragement of scientific investigation by prizes and awards of merit, and for defraying the expenses incidental to specific investigation

ARTICLE X—REFERENDUM

SECTION 1—The General Session shall have the right to discuss questions referred to it by the House of Delegates, and it may, by a two thirds vote, order a general referendum on any question pending before the House of Delegates

SEC 2—The House of Delegates shall, upon a two thirds vote of its own members or upon a two thirds vote of the General Session, submit any question, either through the JOURNAL, or by mail, to the general membership for final vote, and if the persons voting shall comprise a majority of the members, the majority of such votes cast shall determine the question, and shall be binding upon the House of Delegates

ARTICLE XI—AMENDMENTS

The House of Delegates shall have authority to amend any article of this Constitution by a three fourths vote of all the members composing the House of Delegates, *provided* that such amendment shall have been proposed in open meeting of the House of Delegates one year previous to being acted upon, shall have been published at least three times in THE JOURNAL during the interim, and shall have been officially transmitted to each affiliated state and territorial society for consideration at their annual meetings

By Laws

CHAPTER I

MEMBERSHIP

SECTION 1—No permanent member shall take part in the proceedings of the Association or of any of its Sections, until he has exhibited his credentials to the proper officer or Committee, entered his name and address in full on the registration book and paid his annual dues He shall also indicate the Section to which he will officially attach himself

SEC 2—Permanent members who have complied with the foregoing regulations shall at all times be entitled to attend the General Sessions and Sections and to participate in the affairs of the Association, so long as they continue to conform to its regulations

SEC 3—No individual who shall be under sentence of expulsion or suspension from an affiliated society of which he may have been a member, or whose name shall have been dropped from the rolls of the same, shall be received as a member or shall be allowed to continue as a member of this Association, until he shall have been relieved from said sentence or disability by such society, nor shall any person not a member of his local medical society be eligible to membership in the AMERICAN MEDICAL ASSOCIATION

SEC 4—Members may vote for Section officers only in that Section with which, upon registration, they have declared their intention of uniting

SEC 5—Any permanent member who shall fail to pay his annual dues for one year, unless absent from the country, shall be dropped from the roll of permanent members, after having been notified by the Secretary of the forfeiture of his membership

SEC 6—Honorary members shall be elected by the House of Delegates on the nomination of a Section, but not more than three Honorary Members shall be elected in any one year

SEC 7—Honorary and Associate Members shall have all the rights of membership except those of voting and holding office They shall not be assessed for dues, nor shall they be entitled to receive THE JOURNAL free

SEC 8—The House of Delegates shall have authority to provide for membership under proper restriction from among the members of recognized medical societies of neighboring countries, provided that the right of representation in the House of Delegates shall be restricted to affiliated state medical societies in the United States

CHAPTER II

GENERAL SESSIONS

The General Sessions shall include all registered members and delegates, who shall have equal rights to participate in discussions and to vote upon pending questions Each General Session shall be presided over by the President, or, in his absence or disability, by one of the Vice Presidents Before it there shall be delivered upon the opening day of each annual meeting, the address by the President, whose recommendations shall thereupon go to the House of Delegates for action, and on each following session such addresses on scientific subjects as are assigned to orators selected for the purpose It shall have power to create committees or commissions for scientific work of special interest or importance, and to receive reports of the same, provided that any expense incurred in connection therewith by the Association must first be authorized by concurrent action of the House of Delegates and the Board of Trustees

CHAPTER III

HOUSE OF DELEGATES

SECTION 1—The House of Delegates, as far as may be consistent with the Articles of Incorporation, shall be the legislative and fiscal body of the Association Its sessions shall be open to the members of the Association, but except upon invitation of the House of Delegates, they shall have no right to participate in its proceedings

SEC 2—Each state and territorial society entitled to representation shall have the privilege of sending to the Association one delegate for every 500 of its resident regular members, and one for any additional fraction of that number, but each affiliated state and territorial society shall be entitled to at least one delegate

SEC 3—The House of Delegates once in every three years shall appoint a committee of five on reapportionment, of which the President and Secretary shall be members It shall be the duty of this committee to examine the membership lists of all the affiliated state and territorial medical societies, and to determine therefrom the number of delegates to the Association to which each state or territory shall be entitled for the ensuing three years, beginning with the annual meeting next succeeding that at which the reapportionment is approved by the House of Delegates

SEC 4—Members of the House of Delegates shall be elected for a term of two years, and those state and territorial societies

entitled to more than one representative are requested to so arrange such election that one half of their delegates, as near as may be, shall be elected each year

SEC 5—In order that each state and territorial medical society may properly provide for a full delegate representation at each meeting of the Association, it shall have the authority to elect alternates, who, upon presentation of the proper credentials, shall be empowered to serve as delegates in the absence of the regularly elected delegates Provided that in case of the absence of the regularly appointed delegate or alternate, then the permanent members from that affiliated society, who are present at that meeting, shall select one of their number, who shall represent that society, and provided further, that when only one permanent member is present from any society, that member shall represent that society

SEC 6—No one shall serve as a member of the House of Delegates who has not been a permanent member of the AMERICAN MEDICAL ASSOCIATION for at least two years

SEC 7—Every Delegate from a state or territorial society before being permitted to take part in the proceedings of the House of Delegates must deposit with the Secretary, or other designated officer or committee, a certificate signed by the President and Secretary of the State Society from which he receives his authority, stating that he has been regularly and legally elected a Delegate to the AMERICAN MEDICAL ASSOCIATION for a definitely stated term, and the delegates from the sections shall present credentials signed by the president and secretary of the section they represent This certificate shall be subject to review by the Judicial Council, and all disputes as to credentials shall be investigated by the Judicial Council and determined by vote of the House of Delegates

SEC 8—The House of Delegates shall approve all memorials and resolutions of whatever character issued in the name of the AMERICAN MEDICAL ASSOCIATION before the same shall become effective

SEC 9—The House of Delegates shall present a summary of its proceedings to the last General Session of each annual meeting of the Association, or it shall publish the same in a bulletin to be issued each day during the annual meeting

SEC 10—A majority of the members composing the House of Delegates shall constitute a quorum for the transaction of business

CHAPTER IV

ELECTION AND INSTALLATION OF OFFICERS

SECTION 1—All elections shall be by ballot

SEC 2—The election of officers shall be the first order of business of the House of Delegates after the reading of the minutes on the morning of the last day of the annual meeting Only those in attendance at the annual meeting at which the election occurs shall be eligible for election

SEC 3—The officers elected at each annual meeting of the Association shall be installed at the closing General Session

CHAPTER V

DUTIES OF OFFICERS

SECTION 1 *President*—The President shall preside at the General Sessions and over the House of Delegates, preserve order and decorum in debate, give a casting vote when necessary, and perform all the other duties that custom and parliamentary usage may require In addition to these duties the President, on the morning of the first day of the annual meeting following his election, shall deliver an address, not exceeding forty minutes in length, upon such matters as he may deem of importance to the Association He shall discharge such other duties as the Association may impose on him from time to time He may at any time make such suggestions as he may deem for the best interests of the Association, either to the General Session, or to the House of Delegates, or to any standing or special committee of the Association, provided that said suggestions are submitted in writing He shall not be eligible for re election

SEC 2 *Vice Presidents*—The Vice Presidents, when called upon, shall assist the President in the performance of his duties, and during his absence, or at the request of the President one of them shall officiate in his place In case of the death, resignation, or removal of the President, the vacancy shall be filled by the senior vice president, beginning with the first They shall perform all other duties prescribed for that office

SEC 3 *Secretary*—The Secretary shall keep in separate books the minutes of each day's proceedings of the General Session and of the House of Delegates, which minutes shall be read and presented for adoption by the respective bodies He shall give due notice of the time and place of each next ensuing annual meeting, notify all members of committees of their appointment, and of the duties assigned to them, hold correspondence with other permanently organized medical societies, both domestic and foreign, and carefully preserve the archives and unpublished transactions of the Association

It shall also be his duty to verify the credentials of members, to receive and announce all essays and memoirs voluntarily contributed, to determine the order in which such papers are to be read and considered, and to fix a definite hour each day for the general addresses before the Association He shall prepare for publication the official program of each meeting It shall be the duty of the Secretary to provide a special registration book for members of the House of Delegates, in which shall be recorded the name of every delegate in attendance at each meeting, together with that of the society which he represents It shall also be his duty to prepare a roll of delegates attending each annual meeting to facilitate voting by roll call

The Editor of THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION shall be Secretary of this Association

SEC 4 *Treasurer*—The Treasurer shall have charge of the funds and property of the Association, and shall pay out its moneys only on the order of the Board of Trustees, properly attested by their respective officers He shall give to the Board of Trustees bond for the safe keeping and proper use and disposal of his trust, and through the same Board he shall present his accounts, duly authenticated, at every annual meeting of the House of Delegates

SEC 5 *Board of Trustees*—The Board of Trustees shall consist of nine members three of whom shall be elected annually by the House of Delegates and shall serve for three years It shall be the duty of this Board to provide and superintend the publication and distribution of all such proceedings transactions, and memoirs of the Association as may be ordered to be published in such a manner as may be directed, and in doing this it shall have authority to appoint an editor and such assistants as it deems necessary, determine their salaries and procure and control such materials as may be necessary for the accomplishment of the work assigned to it Further to facilitate its work, it shall be the duty of the secretaries of the Association and of the several Sections during each annual meeting, or as soon thereafter as practicable, to deliver to the Board, or such editor or agent as it shall appoint, all such records of proceedings, reports addresses, papers, and other documents as may have been ordered for publication either in the General Sessions, in the House of Delegates, or in the Sections All moneys received by the Board of Trustees or its agents, resulting from the discharge of the duties assigned to them, must be paid to the Treasurer of the Association, and all orders on the Treasurer for disbursements of money in any way connected with the work of publication must be endorsed by the President of the Board of Trustees and countersigned by the Secretary thereof All matters of the Association pertaining to the expenditure of other moneys shall be referred to the Board of Trustees who shall make a report of the same within twenty four hours after the same are referred to them, and if the House of Delegates orders the expenditure of money in connection with said report, the payment shall be made by the Treasurer as provided above It shall be the further duty of the said Board of Trustees to hold the official bond of the Treasurer for the faithful execution of his office, to annually audit and authenticate his accounts, and to present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Association during the year, and the amount of all other property belonging to the Association, under its

control, with such suggestions as it may deem necessary In the event of vacancy of the office of Treasurer, by death or otherwise, the Board of Trustees shall fill the vacancy *ad interim*

SEC 6—All business of each annual meeting shall be completed by the officers who have served through the meeting

CHAPTER VI

STANDING COMMITTEES

The Standing Committees shall be the following

1 A Committee of Arrangements
2 A Judicial Council
3 A Committee on Medical Legislation
4 A Committee on Nominations
5 A Committee on Transportation

And such other Committees as the House of Delegates may create from time to time

CHAPTER VII

DUTIES OF COMMITTEES

SECTION 1 *Committee of Arrangements*—The Committee of Arrangements shall be appointed by the President, and shall be composed of seven members residing in the place at which the Association is to hold its next annual meeting It shall be required to provide 1 A hall for the General Sessions 2 Halls for the Sections 3 Rooms for Committees 4 Rooms for postoffice and the force thereof 5 Rooms for registration and the force thereof To meet these expenses the Committee of Arrangements shall have the proceeds of the exhibition hall This arrangement must be agreed to by the representative of the local committee inviting the Association, before a place for the meeting of the Association is selected by the House of Delegates

SEC 2 *Judicial Council*—The Judicial Council shall be composed of nine members, three of whom shall be chosen annually by the House of Delegates, and shall serve for three years All questions of a personal character, including complaints, protests, and credentials, shall be referred at once, after the report of the Committee of Arrangements or other presentation, to the Judicial Council without discussion

The said Council shall organize by choosing a President and Secretary, shall keep a permanent record of its proceedings, and shall report its findings to the House of Delegates at the earliest practicable moment

SEC 3 *Committee on Medical Legislation*—The Committee on Medical Legislation shall consist of one delegate from each state to be appointed annually by the President of the Association It shall be the duty of this Committee to represent before Congress and elsewhere the wishes of this Association in regard to pending medical and sanitary legislation It shall be the duty of this committee to consider and act upon all proposed national state or local legislation that in any respect bears upon the promotion and preservation of the public health, or upon the material or moral welfare of the medical profession It shall have power to fill any vacancies that may occur in its membership, and to act *ad interim* when necessity arises

The Committee on Legislation shall report to the House of Delegates at each annual meeting its action during the previous year, and shall recommend such action regarding pending legislation as it shall deem proper

SEC 4 *Committee on Nominations*—The Committee on Nominations shall consist of nine members, not more than one from one state or territory, selected annually by the House of Delegates It shall be the duty of this committee, after consultations with the members of the Association, to hold one or more meetings at which the assignment of the offices of the Association for each ensuing year shall be carefully considered The Committee shall then on the morning of the third day of the annual meeting report the result of its deliberations to the House of Delegates in the shape of a ticket providing one, two, or three names for each office, but not more than one candidate for each office shall be named from any one state or territory Nothing in this section shall be construed to prevent additional nominations being made by the members of the House of Delegates

SEC 5 *Transportation Committee*—The House of Delegates shall appoint a Committee on Transportation, which Committee shall secure railroad rates for the annual meeting and publish the same in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION sufficiently early to enable all who desire to attend the annual meeting to obtain necessary information

SEC 6 *Duties of the Committees*—The Standing Committees shall discharge all the duties imposed on them by the By Laws and such other duties as the Association may from time to time direct

SEC 7—The members of the Standing Committees whose appointments are not otherwise provided for shall be selected and appointed by the president of the Association before the adjournment of the annual meeting

SEC 8—The Special Committees shall perform the duties for which they are created and when the report of a special committee is received and acted on said committee shall cease to exist

SEC 9—All Special Committees shall be appointed by the officer presiding over the meeting at the time the special committee is directed to be constituted No one appointed on a special committee, who fails to report at the meeting next succeeding the one at which he is appointed, shall be continued on such committee, unless a satisfactory excuse is offered

SEC 10—The House of Delegates shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such Committees shall have the right to report to the House of Delegates in person, and to participate in the debate thereon pending the adoption of such reports, but they shall not have the right to vote

CHAPTER VIII

TIME OF SESSIONS

SECTION 1—The General Sessions of the AMERICAN MEDICAL ASSOCIATION shall be held at 11 a m and 7 30 p m of the first day of the annual meeting, at 7 30 p m of the two subsequent days and at 12 noon of the concluding day

SEC 2—The various Sections of the Association shall hold their first session of each annual meeting at 2 p m of the first day, and on subsequent days of the annual meeting they shall be in session from 9 a m to 12 noon and from 2 30 p m to 6 p m until their respective programs are completed, or as the Sections themselves may otherwise provide

SEC 3—The House of Delegates shall hold its first session of each annual meeting at 2 p m of the first day, and on subsequent days at such time as may be necessary to complete its business, provided that it shall not meet at hours that will conflict with the General Session of the Association

CHAPTER IX

SECTIONS

SECTION 1—The AMERICAN MEDICAL ASSOCIATION shall be divided into the following Sections

1 Practice of Medicine
2 Surgery and Anatomy
3 Obstetrics and Gynecology
4 Ophthalmology
5 Laryngology, Otology and Rhinology
6 Diseases of Children
7 Materia Medica, Pharmacy and Therapeutics
8 Physiology and Dietetics
9 Nervous and Mental Diseases
10 Cutaneous Medicine and Surgery
11 Hygiene and Sanitary Science
12 Stomatology
13 Pathology and Bacteriology

SEC 2—Each Section shall be composed of such members as have complied with Sections 1, 2, 3, and 4 of Chapter I of these By Laws

SEC 3 *Officers of Sections*—The officers of each Section shall be a Chairman, a Secretary, and an Executive Committee The latter shall consist of the last three retiring chairmen At the commencement of the afternoon session of the third day of each annual meeting, each Section shall elect its own officers to serve for the ensuing year, their duties to commence with the close of the annual meeting at which they are elected and to continue until their successors are elected and qualify Each

Section shall elect annually two representatives to the House of Delegates In each Section a nominating committee of three members shall be elected by open ballot on the first day to make nominations for section officers

SEC 4 *Addresses in Sections*—The Chairman of each Section shall prepare an address on recent advances in the branches belonging to his Section, including such suggestions in regard to improvements or methods of work as he may deem important, and present the same to the Section over which he presides on the first day of its annual session The reading of such address shall occupy not more than twenty minutes

SEC 5 *Papers Before Sections*—It shall be the duty of every member of the Association who proposes to present a paper or report before a Section to forward either the paper or an abstract indicative of its contents, and its *length*, to the Secretary of such Section, at least one month before the annual meeting at which the paper or report is to be presented This abstract shall contain not less than fifty nor more than two hundred words

It shall also be the duty of the Secretary of each Section to arrange such papers in the order in which they shall be read, after which he shall send such information to the Secretary of the ASSOCIATION at least twenty eight days before the annual meeting, for publication in the official program for the use of all members attending the annual meeting

SEC 6 *Length of Papers and Discussions*—No paper, the reading of which occupies more than twenty minutes, shall be read before any Section Authors, however, may read abstracts before the Section within the allotted twenty minutes Such papers shall be referred by the Section to the Executive Committee or to a sub committee specially appointed for their examination Such committee shall be allowed twenty days for such examination at the end of which time they shall forward the Papers to the Board of Trustees, or to the Editor, with such recommendations as they may deem proper No member shall address the Section more than once upon the same subject nor speak longer than five minutes without the approval of the Section

All papers presented directly to the Association, and other matters, may, at the discretion of the Association be referred to the various Sections for their consideration and report

SEC 7 *Publication of Papers and Reports*—No report or other paper shall be entitled to publication in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, unless it be approved by each member of the Executive Committee of the Section before which it is read

Authors of papers are required to return their proofs within two weeks after their reception

Every paper received by this association and ordered to be published and all plates or other means of illustration, shall be considered the exclusive property of the Association, and shall be published and sold for the exclusive benefit of the Association

The Board of Trustees shall have full discretionary power to omit from the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, in part or in whole, any paper that may be referred to it by the Association or any one of the Sections, unless specially instructed to the contrary by vote of the Association

No report or other paper shall be presented to this Association, or any one of its Sections, unless it be so prepared that it can be put at once into the hands of the Secretary to be transmitted to the Board of Trustees, and all papers read before sections must be approved by each member of the Executive Committee of that section

No paper shall be printed as having been read before this association unless it has actually been read by its author or unless for special reasons when the author has been present and prepared to read the paper the Association or Section to which it is presented shall unanimously vote to have it read by title All other papers shall be treated by the board of trustees and editor as volunteer papers

CHAPTER X

ADDRESSES

The House of Delegates shall elect annually, three members to deliver addresses in the General Session of the next ensuing annual meeting—one on some topic or topics relating to general medicine, one relating to general surgery, and one relating to state medicine None of these addresses shall exceed thirty minutes in its delivery

CHAPTER XI

DELEGATES TO FOREIGN MEDICAL SOCIETIES

The President shall be authorized to appoint annually delegates to represent this Association at the meetings of such scientific bodies in foreign countries as are in affiliation with this Association, whose appointment is not otherwise provided for

CHAPTER XII

RULES OF ORDER

SECTION 1 This Association shall be governed by the rules of order prescribed in "Roberts' Manual"

SEC 2 *The Previous Question*—When the previous question is demanded, it shall take at least ten members to second it, and when the main question is put under force of the previous question and negatived, the question shall remain under consideration as if the previous question had not been enforced

SEC 3 *Duties of Members*—No one shall be permitted to address the Association, until he shall have announced his name and residence, which shall be distinctly repeated by the chair, but no member, except an officer of the Association, or an appointed orator, or an officer of a committee presenting a report, shall be permitted to address the General Sessions from the platform Remarks shall be limited to five minutes

SEC 4 No new business shall be introduced at the General Sessions of the Association on the last day of each meeting, except by unanimous consent

CHAPTER XIII

ORDER OF BUSINESS

SECTION 1 *General Sessions*—The order of business of the General Sessions at the annual meetings of the AMERICAN MEDICAL ASSOCIATION shall at all times be subject to the vote of three fourths of all the members in attendance, and, until permanently altered, except when for a time suspended, it shall be as follows

1 The calling of the meeting to order by the President elected the preceding year, or, in his absence, by one of the Vice Presidents
2 Reading and adopting of minutes
3 The report of the Committee of Arrangements
4 The reception of members by invitation
5 Reports of standing committees in the order named in the Constitution
6 The annual address of the President
7 The reception of the reports of all special committees and voluntary communications, and their reference to the appropriate Sections or committees
8 The reading and consideration of the reports of the Committees on Prize Essays, of Chairmen of Sections, and of any special committees
9 Resolutions introducing new business, and instructions to the standing committees
10 Reports from the several Sections
11 Unfinished and miscellaneous business
12 Report of the House of Delegates
13 Adjournment

SEC 2 *The Opening Session*—The opening session shall be for the addresses of welcome, and the responses thereto, for the report of the Committee of Arrangements, and other exercises pertaining to the opening of the General Session, and for such other business as may be provided At this Session the President shall deliver his annual address, which shall be referred to the House of Delegates for action

SEC 3 *The Closing Session*—The closing session shall be devoted to such exercises as may be provided, to the report of the House of Delegates to the announcement of the election of officers and to their installation

SEC 4 *House of Delegates*—

1 Call to order by the President
2 Reading and adopting of the minutes
3 Reports of officers
4 Reports of committees
5 Consideration of recommendations contained in the President's address
6 Consideration of memorials, resolutions or other business referred from the General Session
7 Consideration of memorials, resolutions or other business referred from the Sections
8 Consideration of memorials, resolutions or other business referred from the State Societies
9 Unfinished business
10 New business

SEC 5 *Sections*—Each Section shall have authority to arrange its own order of business

CHAPTER XIV

AMENDMENTS

The House of Delegates shall have power to frame by laws for its own government and for the government of the Association, and to amend the same, *provided*, that the proposed amendment shall be submitted in writing and lay over one day before it is acted upon, and provided, further, that it shall receive the affirmative vote of three fourths of the Delegates present at the meeting

CHAPTER XV

These By Laws shall be in effect and force after the close of the annual meeting of 1901, provided that the Sections shall elect delegates during the session for 1901 2, and provided further that nothing in these By Laws shall be construed to repeal the rules of the Association governing the relation of members to each other and to the Association

After the reading of the report, the President asked the Association what disposition it would make of it

Dr Harris, New York, in order to properly bring the report before the Association, moved that the full report of the Joint Committee on Reorganization, including the Revised Constitution and By Laws be received and adopted Seconded

After the report was discussed by Drs Bulkley and McCormack, Dr Bulkley expressed the hope that the motion to adopt the report would be carried unanimously, if possible

There were cries of "Question! Question!"

The President then put the motion and declared the report adopted by a large majority

Dr McCormack then moved to reconsider the vote by which the report was adopted, and that the motion to reconsider be laid upon the table Carried

Dr Maher, California, moved that a report of the proceedings of the General Sessions, together with copies of the revised Constitution and By-Laws be printed and mailed to each delegate as soon as possible after final adjournment Seconded

Dr Reynolds, Kentucky, moved as an amendment that a copy of the Constitution and By Laws be printed in separate form, in order that the members may put them in their pockets for reference, and that a copy be distributed to every member Seconded The motion as amended was carried

The President stated that inasmuch as there might be some clerical errors in the Constitution and By Laws that had been adopted, he suggested that a committee of three be appointed for the purpose of engrossing the Constitution and By-Laws

Dr McMurtry, Kentucky, moved that the Committee on Reorganization attend to this matter Carried

This Committee consists of Drs J N McCormack, P Maxwell Foshay, and George H Simmons

Dr Love New York, moved that a vote of thanks be extended to the Committee on Reorganization for its superb report Carried

Dr John A Wyeth, New York, was then introduced and delivered the oration in surgery (See page 1611)

The President called for the report of the Committee on American Medical Association Medal, and in the absence of Dr Osler, Baltimore, chairman, the report was passed

The report of the Committee on Senn Medal, Dr Maurice H Richardson, Boston, chairman was called for, and in the absence of Dr Richardson, Dr F H Wiggin, New York, made a verbal report in behalf of the committee, stating that the committee had received two papers during the year, and after due consideration of the matter came to the conclusion that neither paper was of sufficient scientific interest to warrant any award, and therefore no award was made this year

The President said that the report of this committee required no action on the part of the Association, and that the committee would be continued

The next order was the report of the Committee on the Rush Monument Fund, which, in the absence of Dr James C Wilson, Philadelphia, chairman, was read by Dr Henry D Holton

Committee on Rush Monument Fund

H D HORTON, Treas, in account with Rush Monument Fund

1901		DR
June 1,	To cash on hand	$365 05
June 28,	To cash from Dr A Jacobi	100 00
June 29,	To cash from West Virginia Medical Society	50 00
	To cash from Averill note	765 00
	To interest from funds invested	602 50
		$1882 55

	CR
By one thousand dollar bond Western Union Telegraph	$1000 00
By interest and expenses	140 67
By cash on hand	741 88
	$1882 55

Amount of Fund June 1, 1901

Funds invested in bond and mortgage	$11,200 00
Cash on hand	741 88
	$11,941 88

Dr Reed, Wyoming, moved that the report be received and placed on file Carried

The report of the Committee on Scientific Research was called for and the secretary read the following letter

Committee on Scientific Research

BALTIMORE, June 1, 1901

Dr George H Simmons, Secretary of the American Medical Association

Dear Doctor—I regret that it is impossible for me to be present at the meeting of the American Medical Association this year

I do not suppose that Dr Wood has been able, on account of illness, to send a report in behalf of the Committee on Scientific Research I can not learn that there was any organization, and certainly there has been no meeting of the Committee Dr Wood, however, inserted notices in the medical journals calling attention to the existence of the grant by the Association, and requested that applications for appropriations from the fund be sent to him before a specified date Ten such applications were received, and Dr Wood communicated with the members of the Committee by letter regarding the selection of applicants and the amounts to be appropriated to each A decision in this matter had not been reached when Dr Wood became so ill that he could give no further attention to it He then asked me to take the matter in hand You may recall that I then communicated with you, and that you suggested that in view of the lack of previous organization and of meeting of the Committee, and the lateness of the season remaining for action, it might be well to postpone further action until after the meeting of the Association I have followed your suggestion There have been ten applications for appropriations from the funds, several of which at least were eminently deserving

While I regret that the initiation of this important undertaking on the part of the Association has not led to results during the first year, I sincerely trust that the grant will be continued If the $500 appropriated by the Association last year could be added to an additional $500, making $1000 for the coming year, I believe that much good would result If this is not deemed best, I hope that at least the appropriation of $500 will be continued for another year I should suggest that the committee be not limited as now to the granting of sums not exceeding $100 to a single individual It would be well, I think, in selecting the Committee to consider somewhat the care with which the members can be brought together for conference

Hoping that the Association will continue these grants for research, I am, very truly yours, WILLIAM H WELCH

Dr Bert Ellis, California, moved that the report be referred to the General Executive Committee with instructions to report back to the Association Seconded

Dr Happel, Tennessee, asked whether the report did not involve the expenditure of money, to which the President replied it did and the President suggested that it would be well to refer it both to the Board of Trustees and the Executive Committee for a joint report

This suggestion was accepted by the mover and seconder of the original motion, and the motion as amended was carried

Dr Sims, New York, offered the following resolution

Resolved, That this body deplores the action of Congress in abolishing the army post exchange, or canteen, and, in the interests of discipline, morality and sanitation, recommends its re establishment at the earliest possible date

Dr Reed, Wyoming, moved that the resolution be adopted, which was seconded, and after some discussion a motion was made to lay the resolution on the table, which was carried, there being 54 for, and 25 against, tabling the resolution

Dr Reed, Wyoming, then brought up the matter in a different form and moved that a committee of three be appointed by the President to take up this resolution and present it before the proper body for consideration Seconded

The Chair ruled that the motion of Dr Reed revived the specific subject that had been disposed of, and stated that if a motion was made to incorporate the general subject in proper

terms, it might come within parliamentary rules Dr Reed Wyoming, thereupon moved that a special committee be appointed to consider the question of asking Congress to repeal the Canteen Act. Seconded

It was moved as an amendment, that instead of appointing a special committee, the matter be referred to the Committee on National Legislation Seconded

The amendment was accepted, and as amended was carried

The Secretary announced the members of the Nominating Committee

On motion, the Association then adjourned until Thursday

Nominating Committee

The Secretary announced the members of the Nominating Committee as follows

COMMITTEE ON NOMINATIONS—Alabama, W G Harrison Arizona, R W Craig, Arkansas, Joseph P Runyan, California, Bert Ellis, Colorado, C K Fleming, Connecticut, J W Wright, Delaware, John Palmer, Jr, District of Columbia G L McGruder, Florida ——— Georgia, Thos D Coleman Idaho ———, Illinois, Hugh T Patrick, Indian Territory, ———, Indiana C A Daugherty, Iowa, Donald Macrea Kansas, R S Magee, Kentucky, W H Wathen Louisiana, ———, Maine, Seth Gordon, Maryland, ——— Massachusetts, Geo J Engelmann, Michigan, F W Robbins Minnesota, A J Stone, Mississippi, W H Barr Missouri, C H Wallace, Montana, T J Murray Nebraska, W S Conwell Nevada ——— New Hampshire Geo Cook New Jersey Richard C Newton New Mexico Edwin B Shaw, New York, E Elliott Harris North Carolina, James A Burrough North Dakota J N Wear Ohio Jos E Cool Oklahoma Territory, R D Love, Oregon, Andrew C Smith Pennsylvania, W S Foster Rhode Island, Philip K Taylor South Carolina, Charles F McGahan, South Dakota, D W Rudgers, Tennessee G C Savage Texas Bacon Saunders Utah, S C Baldwin Vermont, M R Crain, Virginia Christopher Tompkins Washington N Fred Essig, West Virginia A H Thayer, Wisconsin W H Earles, Wyoming R Harvey Reed, U S Marine Hospital Corps Geo T Vaughn U S Army, Major Richards

Report of Committee on Nomination

Your Committee on Nomination met June 5 with Dr Wm H Wathen, chairman, and Dr Thomas D Coleman, secretary and begs leave to report as follows

For President for the ensuing year Dr John A Wyeth New York, first vice president Alonzo Garcelon Maine, second vice president A J Stone Minnesota third vice president A F Jonas, Nebraska fourth vice president, John R Dibrell Arkansas Treasurer, Henry P Newman Illinois Secretary Geo H Simmons, Illinois On motion, the ballot of the committee was cast for Geo W Webster Illinois for Librarian Board of Trustees, term expiring 1904 W W Grant, Colorado, John F Fulton, Minnesota T J Happel Tennessee Judicial Council Geo Cook, New Hampshire, H H Grant Kentucky, John B Murphy Illinois Philip Marvel New Jersey Louis H Taylor, Pennsylvania, John L Dawson, South Carolina, N Fred Essig Washington Oration in Surgery Harry Sherman, California Oration in Medicine Frank Billings, Illinois Oration in State Medicine, J M Emmert, Iowa Place of Meeting, 1902, Saratoga Springs, N Y Chairman of Committee of Arrangements G F Comstock

[At the General Session June 6 the preceding officers were elected]

Book Notice

MUNICIPAL SANITATION IN THE UNITED STATES By Charles V Chapin, M D Superintendent of Health of the City of Providence Cloth Pp 970 Price, $5 00 Providence R I Snow & Farnham 1901

Dr Chapin's work is a valuable compilation of the data of sanitary legislation in the United States including the laws in regard to the registration of vital statistics It is a compendium of sanitary practice and not intended so much to say what should be done as what has been and is being done The author's personal opinions are not obtruded, though they may be indicated in places The utility of such a volume is at once apparent there are few who are interested in sanitary matters who have not at times felt the need of a work of the kind It does not materially lessen its value that it is impossible for it to be absolutely up to date that would be impossible with the extensive field covered and the ever present vicissitudes of municipal legislation It is, nevertheless, probably as nearly so as it is possible for such a volume to be, and it is therefore a most valuable work of reference and one that will not be likely to be soon superseded A thorough inspection reveals comparatively few deficiencies and a surprising number of facts that might reasonably be expected to escape notice The chief trouble, as it appears to us is, that in this country at least, sanitary legislation and sanitary practice do not always go hand in hand, the execution of the laws is too often defective It would be impossible however, to indicate all such deficiencies in a volume like this, which is on the whole the best, as the most recent and thorough work of its kind available for the physician and sanitarian The author has conferred an obligation on both by its production

Societies

COMING MEETINGS

South Dakota State Medical Society Huron June 10 11
International Association of Railway Surgeons Milwaukee June 10 12
Medical Society of Delaware Lewes June 11
Oregon State Medical Society, Portland June 11 12
American Medico Psychological Association Milwaukee Wis June 11 14
Maine Medical Association Portland June 12-14
Massachusetts Medical Society, Boston June 12

AMERICAN GYNECOLOGICAL SOCIETY

26th Annual Meeting held in Chicago, May 30 31, and June 1, 1901

President Dr Elv Van de Warker, of Syracuse, N Y, in the chair

An address of welcome was delivered by Dr Fernand Henrotin of Chicago, which was responded to by the President

DR CHAUNCEY D PALMER, of Cincinnati, read a paper on

Intraligamentous Cysts, Their Diagnosis and Treatment

This paper had special reference to the diagnosis and treatment of these tumors He spoke first of the classification of ovarian tumors in our text books as being unsatisfactory What we need is a classification that is helpful in the way of diagnosis and treatment He spoke then of oophoritic, paraoophoritic and parovarian cysts He then referred to the symptoms and signs before removal which would enable the operator to differentiate intraligamentous cysts

All ovarian cysts of whatever kind should be removed by surgical procedures, the sooner the better But the removal of intraligamentous cysts demands the most correct knowledge of the parts and surroundings and superior skill The assayist then dwelt upon the advisability, if not necessity, of operators availing themselves of the extraordinary opportunities, when the abdomen is opened, to see and to feel and to map out what it is, where it is, and determine what methods are best to adopt in the removal of pelvic growths Intraligamentous cysts are, as a rule easily peeled out of the broad ligaments Enucleation, first suggested by Dr Mynter of Buffalo can be done, but it ought only to be attempted when the attachments are superficial An attempt begun in the old way on some intraligamentous cysts may have to be abandoned as an incomplete operation, or as an inoperable case Many such cases have died on the table He referred to the danger of wounding the ureters, wounding the uterine arteries, and then he earnestly advocated the advisability of completely exsecting the uterus as well as the appendages thereof when the cysts are bilateral, and where they are deeply embedded within the surrounding textures This new method of procedure, while seemingly the more radical way, is the only rational method of a skillful surgical extirpation of the diseased structures

DR WILLIAM H WATHEN, of Louisville, read a paper on

Improved Technic in the Surgical Treatment of Uterine Myomata

The perfection of technic in operations for the removal

of uterine or pelvic myomata is the result of the application in these operations of the variety of details suggested and practiced by different surgeons, and operators no longer speak of hysterectomy as an operation peculiar to anyone, nor can they in many instances outline in advance the complete technic to be observed or carried out in an operation The dangers during the operation are hemorrhage or injury to the bladder, ureters or intestines, and if the surgeon is prepared to avoid these, and operate speedily, there is hardly a condition that may not be successfully treated Unless there is some contraindication, myomata not larger than a fetal head may be easily removed per vaginam, and if the operator uses well constructed forceps no successful operator would wound the bladder, the intestines or the ureter, the last named of which, if necessary, may be protected by ureteral catherization, which may also be used as a means of protecting the ureters in the suprapubic method Experience will aid in the selection of cases suitable for the vaginal method While the author has removed with ease uterine myomata twice the size of a fetal head, he has had great difficulty in removing one much smaller than a fetal head

Painful Menstruation as a Factor in Determining Character of Operations on the Uterine Appendages

DR PHILANDER A HARRIS, of Paterson, N J, said that extra uterine suppurations so commonly resulting from gonorrheal infection of the uterus, and from ordinary infections of childbirth and abortion, are of such frequent occurrence as to quite overshadow in importance all other causes of acquired dysmenorrhea Not all cases of suppuration in the uterus or tubes cause painful menstruation A small percentage of such cases even in the presence of extensive and long continued suppuration, menstruate painlessly Tubal suppurations may, and usually do, cause painful menstruation before the development of ovarian abscess This is proven by the fact that surgeons so often have exsected both suppurated tubes, at the same time leaving both ovaries, which appeared healthy, with the arrest of all pelvic pains and restoration to health, including a cure of the dysmenorrhea Ovarian abscess frequently develops from tubal suppuration, with the effect of increasing, modifying or localizing not only intermenstrual pains, but also the pains of menstruation Pronounced and persistent primary dysmenorrhea, or the dysmenorrhea which exists from puberty, will probably not be obliterated by the simple excision of diseased tubes, except, as in certain rare instances, it be due to gonorrheal infection prior to the beginning of menstruation, in which event it would be curable by excision of the tubes, vaginal incision and drainage, or the removal of the pyogenic sacs in the ovaries By excision of a tube is meant its removal to the uterine mucosa by making an elliptical incision in the uterus about the tube and closing the chasm with sutures The author's partially conservative surgical work in this connection has shown him that, while he has maintained for about 95 per cent of all women thus operated the item of menstruation, he has had a higher percentage of relief and symptomatic cures, and far greater satisfaction with the results obtained than accrued from his former and more extensively mutilating and exsective operations

DR E C GEHRUNG, of St Louis, read a paper entitled

Status of Menstruation

Menstruation is not, as has been supposed, a special function of the generative organs of women, but only the perverted counterpart of the menstruation of the lower animals This transformation into a monthly "hemorrhage" (menorrhagia) has generally been brought about by the necessities and results of the social, moral and connubial life of mankind as well as through the transmission by inheritance of certain debilities of the generative apparatus, and more especially by the erect position and its natural consequences, assumed by the human species This fact being admitted, the profuseness and prolongation of the sanguineous loss is a proof that it is now a physiologico pathologic condition, predisposing to anemia and all its direful consequences, pre eminently to the nervous system In the great majority of cases the quantity of blood lost during so called normal menstruation is an unnecessary, and therefore pathologic, waste of the very essence of life It stands to reason that in all cases of depressed vitality this loss should be reduced as much as possible The best means for controlling the waste is the vaginal (not uterine) tampon, applied "secundum artem" Whenever curettage is not indicated or applicable, and where it has failed in gaining the desired result, the tampon is the means indicated Chronic and acute inflammation of the pelvic organs are contraindications Unless the restriction of the waste is put in execution, tonics are useless, because they simply increase the pressure and consequently the waste, while after the repression, or simultaneously with it, they seem to work wonders

The Age of First Menstruation in the United States

DR G J ENGELMANN, of Boston, read a paper on this subject Over 10,000 observations as to the time of first menstruation of American born women, many with reference to points never before investigated, here or elsewhere, gives him ample material for an authoritative solution of the questions involved These observations, from his own practice and that of helpful friends, are many, and the identity of results obtained in far distant points, Montreal and New Orleans, St Louis, Cincinnati and Boston, vouches for their correctness Furthermore, they are corroborated by all previous records, a total of 6,000, in such points as these may cover The American born are more precocious than the women of other countries in the same zone, 14 is the age of puberty in the United States and Canada 15 5 in the temperate zone of Europe The native American is more precocious than the American born of foreign parents, but the latter closely approximates the American of American parentage, even in the first generation Racial characteristics fade rapidly away, the age of puberty in Germany is 15 5 to 16, in Ireland 15 3, and for the girl born in America of German or Irish parentage 14 5, in St Louis as it is in Montreal, the Canadian French are the only exception, between 14 and 15 in their native land, these alone of all races are more precocious than the American of the same class when born in this country, 13 7 is the mean age, climate here has absolutely no influence, race very little Mentality surroundings, education and nerve stimulation stand out prominently in this country as the factors which determine precocity

Cancer of the Uterine Fundus

DR J M BALDY, of Philadelphia, read this paper It is with the object of calling attention of the profession to, and emphasizing as emphatically as possible, the wide practical difference between cancer of the cervix and cancer of the fundus, that this paper is presented It has been said that practically all cases of cancer of the cervix eventually die of the disease, that practically all cancers of the fundus remain well if operated upon This statement is more generally true than one would suppose at first glance It has been my own, and the experience of other surgeons Less than 5 per cent of cases of cancer of the cervix are cured, no matter what line of treatment is followed Twenty four cases of cancer of the fundus have passed through my hands Of these, 3 were either too far advanced for operation, or refused operative treatment On the remaining 21 cases hysterectomy was performed by the vaginal method, the abdominal method or the combined vagino abdominal method Two of the 21 cases died of the operation Of the 19 remaining cases, all are alive and well to day, with two exceptions One of these died of pneumonia seven years after operation It is strongly suspected from the reports that the other one has recurrence Making all allowances for mistakes and the general unreliability of statistics, the fact stands out strongly that about 75 per cent of these cases are well and free from signs of cancer, as against 5 per cent or less of cancer of the cervix

The Status of Hysterectomy for Uterine Cancer

DR CYRUS A KIRKLEY, of Toledo, Ohio, read a paper on this subject The paper was a plea for conservatism in the surgical

treatment of uterine cancer, and contrasted its pathology and treatment of half a century ago with that of the present Electro cauterization, as practiced by Dr Byrne, was given the preference over all methods of operating It had not received the recognition it deserves Dr Bryne's skill in its application could only be acquired as in other operations Freedom from danger and longer period of exemption were its strongest recommendations An old table published by Dr Bryne in 1889 was referred to, so that in comparison vaginal hysterectomy might have the advantage In a total of 367 cases there was not a single death from the operation The position held by our fathers fifty years ago, that hysterectomy for cancer has its narrow limitations, that it should be done early, if at all and that only temporary relief can be hoped for, is just as true to day

Prolapse and Procidentia of the Uterus

DR HENRY T BYFORD, of Chicago, read this paper He holds that the essential feature of the prolapse is the want of supporting power of the pelvic connective tissue To suture the uterus to the abdominal walls is to support the pelvic connective tissue by means of the uterus and is wrong and inefficient. The best and most rational method is to draw up and attach the peri uterine tissue and thus keep the uterus up by means of its natural supports In addition to the ordinary operations for lacerations and relaxation at the vaginal outlet, the author proposed a method which he described in detail

Panhysterokolpectomy, A New Prolapsus Operation

DR GEORGE M EDEBOHLS, of New York City, read a paper under this title There is room, in the treatment of complete prolapse of the uterus and vagina, for an operation which, properly and successfully performed, will guarantee a certain and permanent cure of the prolapse Such an operation is panhysterokolpectomy the essentials of which consists in complete removal of the uterus and vagina, followed by operative obliteration or columnization of the bed of the genital tract The tubes and ovaries are not disturbed, if healthy, if diseased, they are removed with the uterus and vagina Obliteration and columnization of the bed of the removed uterus and vagina is effected by means of from seven to nine buried pursing sutures of chromicized catgut placed about 2 to 2 5 centimeters apart, and running parallel to each other Each suture gathers the raw surfaces from the periphery in circular fashion, and draws or purses them together in the median line It is buried by being pushed upward towards the abdomen, while the next suture is being tied beneath it

The effect of the completed operation is to build a solid pelvic floor 10 to 15 centimeters in depth, and to establish broad apposition of the base of the bladder and the anterior surface of the rectum, conditions similar to those obtaining in the male pelvis

Pus in Abdominal Operations

DR HUNTER ROBB, of Cleveland, read this paper The author has become convinced that operators not infrequently err in carrying out radical abdominal procedures when the patient's resistance is in such a lowered condition that she is very apt to succumb to the shock of the operation *per se* Such a condition must always be given careful consideration when deciding for or against operative interference during an acute attack of a localized or more or less generalized pelvic peritonitis Believing that this factor has a very important significance in influencing results the speaker has made it a rule during the acute stage of a pelvic abscess to defer an operation so long as it seems safe to do so In the meanwhile the patient is kept perfectly quiet on her back in bed and heat in the form of flaxseed poultices or turpentine stupes is applied to the abdomen A vaginal douche of a gallon of a warm one per cent. solution of carbolic acid, or a saturated boracic acid solution is given twice daily For nourishing the patients he depends upon nutritive injections entirely

After briefly discussing drainage in pus cases the author gave the clinical and bacteriological analyses of 72 consecutive, unselected abdominal sections for suppurative diseases of the tubes and ovaries, with two deaths

Removal of the Female Urinary Bladder for Malignant Disease

DR MATTHEW D MANN, of Buffalo, said that treatment may be removal through the urethra, the vaginal septum, or by suprapubic cystotomy The operations are the removal of the growth and its base, resection of part of the bladder, or cystectomy The ureters need no attention at the time of the operation, as by the removal of a portion of the anterior vaginal wall they will discharge into the vagina If possible, the ureteric openings into the bladder should be left intact This will rarely be possible He does not believe in uretero intestinal anastomosis The vagina can be used as a receptacle for the urine, as was done by Pawlik If this be done, there will be little danger of infection traveling to the kidneys, as the newly made bladder can be kept clean

The operation is done in the Trendelenburg position The peritoneum over the bladder being cut, the bladder is enucleated by the fingers, and the base, with the anterior vaginal wall still attached, is removed The uterus is then removed, and the peritoneum closed over the floor of the pelvis Mann reports two cases, both of which recovered from the operation

Total Extirpation of the Urinary Bladder

DR J WESLEY BOVÉE, of Washington, D C, gave an epitome of the history of operative procedures in partial and complete removal of the bladder, and a digest of 96 cases, which he had collected from the literature He discussed the methods of disposal of the ureters, the indications and contraindications, and the results of all operations up to date

Shock from a Clinical Standpoint.

DR EUGENE BOISE, of Grand Rapids, Mich, read a paper with this title The generally accepted idea that the pathology of shock is essentially a paresis of the vasomotor nerves, does not seem to be borne out by the clinical manifestations, when analyzed according to undisputed physiologic facts The basis of the theory of paresis is the thought that the extremely low arterial tension of shock is inconsistent with vasomotor stimulation, which, by causing arterial contraction, should give high tension On the contrary, the symptoms of shock can, in reality, only be explained by the theory of extreme stimulation of the entire sympathetic system Laboratory experiments have demonstrated that extreme stimulation of the cervical sympathetic will cause cardiac and arterial spasm with consequent low arterial tension by reason of incomplete diastolic relaxation of the heart Post mortem records show that in fatal cases of shock the heart is found contracted and empty, even ruptured, showing a condition of extreme stimulation of the vasomotor system, rather than paresis In shock, then there is arterial and cardiac spasm, with consequent low tension This causes the peculiar pallor and the condition of mental and physical lethargy The perspiration of shock is caused by stimulation of the secretory nerves of the sweat glands, branches of the sympathetic system Experiments have shown that the secretion of perspiration is independent of vascular conditions The other clinical manifestations of shock can readily be explained by this theory of hyper irritation of the entire sympathetic system, and only by this Moreover, those remedies which are of benefit in shock are such as act as sedatives to the vasomotor nerves Nitrite of amyl and nitro glycerin are noted arterial relaxants, and yet they are very beneficial in shock, so, also, with strychnia The opinion of operators of large experience is that to be of benefit it must be given in very large doses And yet all therapeutists agree that in such doses strychnia paralyzes the vasomotor center and the intracardiac ganglia, and therefore is absolutely contraindicated if the vasomotor nerves are already paretic, so also with normal saline infusion To derive the greatest benefit it should be used intravenously and at a temperature of 118 or 120 Thus, when diluted by the mass of blood in the vena cava the temperature is so reduced as to be sedative to the irritated cardiac and arterial nerves and muscles and their spasmodic condition is relieved Therefore, shock is essentially a hyper irritation of the entire sympathetic system of nerves

Resections and Exsections

DR. FERNAND HENROTIN of Chicago presented the salient

points concerning the questions involved in resection of the ovaries and tubes, as there is still much doubt regarding the results obtained, and as to the proper methods to pursue He considered the subject of resection and exsection under three heads 1, diseases involving the tubes 2, ovarian disease, 3, chronic composite diseases These three topics were taken up seriatim, and discussed at great length The author has performed at least 250 operations which might be classified as salpingotomies, salpingectomies, and ovarian resections He could safely state that 40 per cent may be termed delayed and partial cures, or failures Of this 40 per cent the heaviest proportion by far comes from such as have had salpingotomy or tubal resection performed The next most complaining class are those in which the ovaries alone were resected and the least suffering and the best health are found among those in whom the tubes when affected were entirely exsected and the whole or portion of the ovaries was removed He has not had to reoperate more than five or six times By salpingotomy the author means opening into the lumen of the tube, and by tubal resection is meant the removal of a portion of a tube including the mucosa, and his statement presumes a material pathologic alteration in the portion removed or incised Under such conditions, he had no hesitation in stating that for every baby born there would be 40 uncured or partially cured patients

The Future of Gynecology as a Surgical Specialty

The President's Address was on the future of gynecology as a surgical specialty The general scope of DR VAN DE WARKER'S address was given in an anecdote of a noted ovariotomist who was invited by the President to contribute a paper to the Section on Obstetrics and Gynecology of the AMERICAN MEDICAL ASSOCIATION, at the session at which he presided as Chairman The ovariotomist declined on the ground that he was not a gynecologist That ovariotomy and hysterectomy and other abdominal operations were general surgical procedures, and were more in the line of the general surgeon than the gynecologist, and wound up his letter of refusal by predicting that the time was not far distant when these operations would be by general consent of the public in the hands of the all round surgeon The speaker asks the question if that time has not arrived The public consults the general surgeon as frequently as the special surgeon A large proportion of the major pelvic operations are now made by men who are not specially recognized as gynecologists Surgery in general has made as marked advances in all directions as that which was at one time by common consent relegated to the specialist The lay public has become more familiar with serious abdominal operations made by the general surgeon than those made by the gynecologist The old operation, ovariotomy, is but rarely seen in the title of a paper and is relegated from the current journal to the pages of the text books The same may be said of the removal of the tubes and ovaries, the removal of pus sacs, Battie's and Tait's operations Great international reputations were made in these fields, which is no longer possible The influence of the gynecological surgeon will however, always be felt To him as a man of last resort will always be left the question of methods and expediency Total hysterectomy for cancer is yet on trial It is already abandoned by able men, while others are hopeful of good results We know little of the subject of genital ptosis in women, our treatment of uterine displacements is ank empiricism Would not the gynecologists of France be doing a better service to their country and to science if they were to find the cause and conceive the remedy for the decadence of the birth rate, rather than bend their energies in finding a new way to perform an operation?

Indications for Cesarean Section as Furnished by Pelvic Contractions

DR J W WILLIAMS, of Baltimore, stated that in 2123 cases delivered in the obstetrical department of the Johns Hopkins Hospital, 278 (13 1 per cent) had contracted pelves The pelves were measured both externally and internally, and designated as contracted when the conjugata vera was 10 cm or less in generally contracted and 9 5 cm or less in flat, pelves Of the patients 941 were white and 1182 black Contracted pelves occurred in 6 91 per cent of the former, and 18 1 per cent of the latter That is, in every 14th white and every 6th black woman Of the 278 cases 199 ended spontaneously (71 58 per cent) The number of spontaneous labors decreased with the increase in the pelvic contraction, as shown by the following table Conjugate vera 10 9 cm, 77 28 per cent spontaneous, 8 9 8 cm, 61 54 per cent spontaneous, 7 9 7 cm 33 1/3 per cent spontaneous, 6 9 5 5 cm, 0 per cent spontaneous The cases requiring operation were delivered by high forceps, version, symphysiotomy, Cesarean section, craniotomy upon the dead child or embryotomy, according to circumstances, giving a gross fetal mortality of 12 96 per cent, and a gross maternal mortality of 2 88 per cent which, by deducting the cases in which the death of the child or the mother was not due to the operators, gave a corrected mortality of 4 32 and 0 72 per cent respectively In view of the markedly improved results following Cesarean section, the indications for its performance should be widened Thus we find that Zweifel, Olshausen, Reynolds, Bar, Charles and Cragin have performed 162 operations with 5 deaths, a mortality of 3 per cent He therefore believes that in uninfected cases the upper limit for the absolute indication for Cesarean section should be advanced from 5 5 to 7 cm, and the relative indication from 7 or 7 5 to 8 5 for flat, and 9 cm for generally contracted pelves With the absolute indication the operation should be done either at the end of pregnancy or the onset of labor, but when the relative indication is present the woman should be allowed to go into the second stage of labor, and have bearing down pains for one hour, when, if the head does not show signs of molding or descending, Cesarean section should be performed, instead of forceps upon the movable head or version So that at present Cesarean section for the relative indication should compete with high forceps or version, instead of with craniotomy upon the living child, as in the past On the other hand, if the patient be infected, or her surroundings such that an aseptic operation can not be performed, high forceps or version should be attempted, followed by craniotomy in case one fails to deliver the child by their means, and Cesarean section reserved for those cases in which an absolute indication is present on the part of the pelvis

Circumstances which Render the Elective Section Justifiable in the Interests of the Child Alone

DR EDWARD REYNOLDS, of Boston, summed up his experience and study of the subject in the following propositions 1 The Cesarean section performed late in labor, or in the presence of infection of the uterus or other complicating constitutional conditions, has been shown by the experience of almost every operator who has tried it, to have so high a mortality as to be totally unjustifiable when performed in the interest of the child alone 2 When a Cesarean section is performed on a healthy woman, early in labor, and under other otherwise favorable circumstances, for merely mechanical indications, it has, in skilled hands, no mortality other than the fractional percentage incidental to all considerable operations *per se* 3 The inconveniences and high morbidity rate of symphysiotomy render it distinctly inferior to the section as an operation of choice, but it is an operation which, as compared to craniotomy, or prolonged and forcible high forceps work without it, involves almost no increased risk to life 4 The induction of premature labor for contracted pelvis results in so high a fetal mortality as to be unwarranted when placed in opposition to the performance of the Cesarean section at the beginning of labor and in favorable cases

The Technique of Cesarean Section

DR MATTHEW D MANN, of Buffalo, first discusses the relative merits of the Saenger and Porro operations He concludes that there is no rivalry, but that each has its proper place The classical operation should be done in all elective cases when the woman is in good health, the operation done in time and all the conditions favorable The Porro operation should be done when the uterus is septic, when gonorrheal infection is known to exist, when the uterus refuses to contract, when there are large fibroids or ovarian tumors which can not be removed without injuring the uterus Small fibroids usually

disappear after pregnancy Other indications for the Porro are Disease of both ovaries when the uterus is torn, or ruptured in labor in cancer of the cervix, when the patient is greatly reduced and bearing the operation badly, in osteo malacia and bad atresia of the vagina

The Place of Symphyseotomy as Contrasted with Section

DR. CHARLES JEWETT, of New York City, presented the following conclusions 1 Symphyseotomy is still a useful operation within a very limited range of pelvic contraction 2 It is suited to conditions in which only very little additional pelvic space is required for delivery 3 It is a valuable recourse, therefore, in cases in which forceps unexpectedly proves inadequate 4 Axis traction forceps, with the aid of posture, should always be tried before resort to symphyseotomy 5 Its results would be much improved by restricting it to pelves with a conjugate of not less than 7 5 cm, 3 inches 6 Under equally favorable conditions its total mortality should be no greater than that of Cesarean section 7 When the pelvic space permits, it should replace Cesarean section in the presence of exhaustion 8 It may be elected primarily as an alternative of Cesarean section, when the operator can be assured that the degree of obstruction is well within its safe limit. Here the choice of operation is largely a matter of individual preference 9 Within its proper field symphyseotomy is better than Cesarean section for an operator of little experience in abdominal surgery

Relative Merits of Bipolar Version with Slow Extraction and Accouchement Force in the Treatment of Placenta Previa.

DR. HENRY D FRY, of Washington, D C, stated that podalic version was discovered by Paré in the 16th century The method was practiced and prompt delivery recommended in all cases of placenta previa Until the discovery by Braxton Hicks, in 1861, of the bipolar method of version, subsequent literature added little of value except the use of the tampon, rupturing the membranes, and separation of the placental attachment as far as the finger could reach

The mortality of these methods of treatment was from 25 to 50 per cent. for the mother, and from 50 to 80 per cent for the infants The main cause of death was loss of blood during the dilatation of the os and from laceration of the site of the placental attachment The advantage of bipolar version is the ability to successfully perform it with very little dilatation and with consequently less loss of blood In placenta previa a fatal result is usually due to hemorrhage or sepsis The hemorrhage is unavoidable and incident to dilatation of the os Consequently the method requiring the least degree of dilatation necessary to perform version will naturally be expected to give the least hemorrhage After dilatation be obtained in sufficient degree to insert several fingers, further continuance of the process by manual means is likely to endanger the integrity of the soft parts In other words the artificial dilatation sufficient to perform bipolar version is comparatively safe, while that necessary for the insertion of the hand and internal version is dangerous The rapid delivery of the infant in accouchement force adds additional risk of rupture

Scratch Marks on the Wax Tipped Bougies in Diagnosis Calculi

DR. HOWARD A. KELLY, of Baltimore, exhibited nine drawings made by Mr Becker, showing scratch markings made in wax tipped bougies by calculi in the kidney and ureter, also pictures of the calculi and the bougies used were shown A mixture of melted dental wax and olive oil, equal parts, was used to tip the renal catheters This substance produces a smooth and highly polished surface, which on coming in contact with a stone is scratched or gouged in longitudinal strie The mucous membrane of the urinary tract cannot possibly affect the waxed surface

DR. ANDREW F CURRIER of New York said that the importance of this class of injuries is measured not merely by the immediate damage to the skull or the soft parts of the head but by the possibility of death as a near or remote result by the possibility of lifelong defect or deformity, and especially by such detrimental effect upon the structure of the brain that development is arrested or prevented, the individual manifesting mental incompetence in any degree between slight backwardness and hopeless idiocy Unfortunately, post mortem examinations in fatal cases from this cause are seldom made, hence our pathological knowledge of the subject is incomplete The free use of the obstetric forceps has, on the whole, produced favorable results but it is equally true that its untimely, injudicious or unskillful application has caused injury to many mothers and destroyed the lives of many children

Tetanus Following Celiotomy, with Report of Two Cases

DR HENRY C COE, of New York, in his introductory remarks stated that tetanus is such a rare complication of abdominal section, that many operators of large experience have never had a case Statistics have shown that the disease is especially fatal after ovariotomy and hysterectomy Tetanus is a rare cause of death after aseptic operations, as shown by reviews of various hospital records Environment seems to make little difference In Bellevue Hospital, where conditions are apparently most favorable to development of tetanus, this is almost unheard of, except as the result of wounds received before the patient is admitted In the General Memorial Hospital, on the contrary, where the conditions are infinitely better, two fatal cases have occurred since the Hospital was opened (1887) and both in the service of the writer In both cases tetanus followed clean operations, after a normal convalescence, and under conditions which were quite inexplicable

DR J DUNCAN EMMET, of New York City, read a paper on "Myomectomy During Pregnancy with Delivery at Full Term"

The following officers were elected for the ensuing year President, Dr S C Gordon, Portland, Me, first vice president, Dr George M Edebohls New York City, second vice president, Dr Edward Reynolds Boston, secretary, Dr J Riddle Goffe, New York City, treasurer, Dr J Montgomery Baldy, Philadelphia Atlantic City, N J, was selected as the place for holding the next annual meeting

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AMERICAN ACADEMY OF MEDICINE

Twenty sixth Annual Meeting, held at St Paul, Minn, June 1 3 1901

President Dr S D Risley, of Philadelphia, in the chair

Drs L Duncan Bulkley, of New York, Thomas D Davis, of Pittsburg, and Dr G Hudson Makuen of Philadelphia, were appointed the nominating committee Forty two new members were added to the fellowship

The First Year Medical Curriculum

DR THOMAS D DAVIS, of Pittsburg said there had been great changes in the curriculum of the academical departments of all our institutions of learning—changes—not advances He did not agree that many of the changes had been improvements in education It would appear that the courses in arts and sciences had been arranged mainly to give a short cut into the profession rather than to broaden and deepen the foundations of true mental development It is his conviction that no plan surpasses for true professional education foundation the old severe classical course, particularly valuable in developing the judgment and reason and forming the habits of application and mental concentration Anything that can not show its advantages in dollars and cents has been placed in the background He impressed the importance of the subjects taught in the last two years of a college course, and believes that the first year course of a medical school should approach the last year course in a college A four year medical course is not of itself an advancement in medical education An entire rearrangement of the curriculum in our medical schools is necessary to correspond to the four years required Botany should be taught, to give a more correct foundation for the vegetable materia medica

DR LAERTUS CONNOR, of Detroit, believed that colleges of all kinds were committing a grievous wrong to their students in not having them taught so to write that they could be understood clearly and forcibly as well as in not teaching them how to talk when upon their feet Without this training they are handicapped If necessary this instruction should be put in with the study of anatomy and chemistry Manual training

in that their fingers might be able to follow out the students' perceptions was also advocated, as was also "a little bit of business training' which would make the physician more prosperous, and more reputable in the minds of those in business circles A number of physicians are wrecked because they lack business training

DR V C VAUGHAN thought it a mistake that our students were not more frequently compelled to write theses, and that the abolition of the requirement was a backward step Before a man studies medicine he should know mathematics through plain trigonometry Also, the man who will get the best out of medicine must have a reading knowledge of French and German He should have some knowledge of both Latin and Greek The fact that a man has an A B degree may mean much or almost absolutely nothing He thought it time that those interested in medical education in this country should force the literary school to give courses that properly lead to medicine He expressed himself in sympathy with the law enacted by the New York legislature compelling every student to stay four years in a medical school no matter what degree he may have

DR ALBERT GOLDSPOHN, of Chicago, heartily endorsed Dr Vaughan's sentiments in regard to a knowledge of French and German He felt that there is no possibility of a man keeping abreast with what the world affords unless he were a thorough student of German and French, from them getting the substance of what the rest of the world produces A deficiency in the medical curriculum of to day is the failure to appreciate the power of mind over matter the want of a proper understanding of this psychologic part of man The amount of instruction in histology is grossly defective He felt that a good, thorough college course and then a four years' medical course likely to do the most good

DR EDWARD JACKSON of Denver, thought that the study of logic and psychology as carried on furnished a very poor outfit, or a very insufficient guarantee of a logical mind or an ability to apply psychologic principles to general facts In illustration, a baseball or billiard player learns to do a certain thing with perfect accuracy, promptness and ease, and yet knows nothing perhaps of the names or forms of classification or arrangement of the muscles by which he does it, still less of the nerves paths by which he accomplishes his purposes

DR L DUNCAN BULKLEY thought that crowning evil of medicine, the advertising drug business, was due to faulty education in our medical schools Another fault was in too great a crowding from minutiæ He emphatically approved of the suggestion that students be required to write a thesis at the end of each year He had seen too often in young men coming up for hospital examinations a want of concentration of thought

Is the Demand for Reciprocity Based on Fact or Fancy?

DR CHARLES MCINTIRE, of Easton, in this paper gave the results in the examination of reports of the various state boards of medical examiners for 1900, in order to form an estimate of the comparative number of physicians who seek to move from one state to another The figures quoted in the paper give the entire number examined, the number failing, and of those failing, the number who were not graduates of the last class A tabulated statement showed that out of 511 individuals, 292 could have had an opportunity of taking a state examination elsewhere A considerable number failed, and were coming up for a second, only to fail again It would be far from the truth to infer that of the larger number who were sustained in their examinations, the same proportion of older men presented themselves, at the same time, many such are included in those who received a license, and it will not be an overstatement to assume that the number of those who passed the examinations who would have had the privilege of reciprocity extended to them, fully offsets the number who failed in the examinations who had never made the effort to practice elsewhere If so, there are at least 292 out of the total number examined who would have been able to avail themselves of the privilege of reciprocity or about 7 5 per cent

The Desirability of Reciprocity in Medical Licensure

DR J N HALL, of Denver said that an experience of six years on the Colorado State Board of Medical Examiners demonstrated that many physicians of excellent repute seek a residence in that state because of illness, either personal or otherwise Though such men are fitted to practice medicine they are rusty on the details of the foundation studies Reciprocity between states having stringent requirements would be of the utmost benefit to men of this type Reciprocity, however, should not be established, except among those states where requirements are essentially equivalent

Reciprocity in Medical Licensure from the Standpoint of a Physician Who Changes His Residence

DR EDWARD JACKSON, of Denver, in this contribution, said that about one in every four or five physicians changes his field of practice from one state to another, at some time during his professional career In making such a change the difficulty is not with the practical branches, but with passing the examination in what may be regarded as the preliminary studies—chemistry, anatomy, etc The physician who removes across state lines can not justly be expected to keep better posted in those branches than the most of those who do not move "Reciprocity" seems liable to be a waiting for others to do something rather than a practical measure of relief The acceptance of the certificate of another state board, as evidence of a proper acquaintance with such preliminary studies, would remove the chief hardship The main obstacle to this is fear of "lowering the standard" But the "standard" in many states is already "so high" as to favor evasion and special legislation letting in all sorts of irregular practitioners and to threaten the permanence of laws regulating medical practice

Some of the Ethical and Sociologic Relations of the Physician to the Community

DR S D RISLEY in his presidential address showed that a most striking characteristic of the medical man is a sense of obligation to the community, that this ethical attitude finds expression, not only in the daily routine of his laborious professional service, but in a pronounced educational influence on all those lives which pertain to the healthfulness of the people and their socio medical welfare, that this influence is signally exerted in the investigations and control of the relation which our defective classes sustain to the social body Almost suddenly the student of social evolution has come to realize that through the altruistic spirit of our civilization a rapidly increasing percentage of degenerates have grown up in our midst, a fact which presents a serious and most complex problem for solution by the new century Two suggestions are made for its arrest 1, the legalization of means to prevent propagation of defectives by a sexualization, and, 2, by a wider education of the community regarding the importance of selection in the marriage contract and its control by the state To solve it wisely and humanely will require the best efforts of the church man and the physician and the statesman

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ILLINOIS STATE MEDICAL SOCIETY

Fifty first Annual Meeting held at Peoria, May 21 23, 1901

President Dr George N Kreider Springfield, in the Chair

At a preliminary meeting of the Society, called by the Legislative Committee several propositions were discussed The question of a medical practice act and board of examiners was taken up, freely discussed, and a committee appointed to draft a bill providing for a Board of Medical Examiners in the State, the committee to consult such laws as are operating best in other States A resolution was adopted requiring that a bill be introduced in the next legislature, urging that the true names and quantities of ingredients be plainly printed on each package of patent medicines and nostrums offered for sale, the Society being instructed to do what it can to further the passage of such bill provided the Legislative Committee believes it can be done without jeopardizing other desirable bills

Resolved, That school of graduation shall be no bar to membership in the Illinois State Medical Society, providing such physician is recognized by the local society as qualified and not claiming to practice any exclusive system of medicine

STATE SOCIETY JOURNAL

After a free discussion, the following resolutions were adopted

Resolved, That as far as practicable the *Journal* of the Society be made the official organ of the city, local, county and district societies in the state

Resolved, That the *Journal* may accept all ethical advertisements under the same restrictions that apply to advertisements in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

Resolved, That the Judicial Council select some member of the Society to act as Editor and Manager of the *Journal*, said Editor and Manager to be paid a reasonable salary out of the net profits to be derived from the publication, the amount of salary to be determined by the Judicial Council

REORGANIZATION

A committee of five, consisting of Drs Graham, Pettit, McAnaly, Ochsner and Roskotten, was appointed to study the plan of reorganization as submitted by the Secretary of the AMERICAN MEDICAL ASSOCIATION, Dr George H Simmons This Committee reported as follows Your Committee would respectfully recommend the following, believing that this form of notice is sufficiently comprehensive to allow of all desired changes and yet sufficiently specific to meet the requirements of the constitutional provision relating to amendments

Notice is hereby given in accordance with Article IX of the Constitution that, at the next annual meeting of the Society, to be held in May, 1902, such changes in the Constitution and By Laws will be presented for consideration and adoption as will provide for reorganization on the basis of the following propositions

1 That the work of the Society be divided into two parts, *scientific* and *general business*, the latter to include the nomination of officers, the control of finance the conduct of the *Journal* work relating to legislation and such other matters as may be referred by the Society, and to be conducted by delegates who shall be chosen by the constituent societies

2 That membership in good standing in a county medical society or in the absence of such county society, then in a district or city covering the county of residence shall constitute membership in the State society

The Committee also recommended that the Society be requested to appoint a committee of three to formulate and adjust the proposed amendments during the coming year

The report was unanimously adopted

This meeting was the most successful in the history of the Society, both as regards its scientific work and attendance The number of members who registered was a little over four hundred, and at one of the sessions nearly six hundred physicians were present.

OFFICERS

The following officers were elected for the ensuing year President, Dr J T McAnaly, Carbondale, first vice president Dr M L Harris, Chicago, second vice president, Dr J W Hensley, Peoria, secretary Dr E W Weiss Ottawa, treasurer Dr Everett J Brown, Decatur, editor and manager of the Society *Journal*, Dr George N Kreider Springfield

Quincy was selected as the place for holding the next annual meeting

The following are the officers of sections

Practice and Medicine—Chairman Dr R B Preble Chicago secretary Dr S E Munson Springfield

Surgery and Obstetrics—Chairman Dr E E Mammon Bloomington secretary Dr William E Schroeder, Chicago

State Medicine—Chairman Dr J M Wilcox Clinton secretary Dr W K Newcomb Champaign

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NEW YORK OBSTETRICAL SOCIETY

Regular May Meeting

Dr N J Boldt in the chair

Two Ventral Fixations One Ending in Rupture and One in Cesarean Section

Dr ROBERT L Dickinson of Brooklyn read this paper He said that although ventral fixation and suspension had been reported in some hundreds of cases, the two complications here presented were sufficiently rare to warrant publication Cesarean section had been done eight times up to 1889, and rupture of the uterus was not common

The second case presented four points of interest 1 The uterus was more displaced, more upside down, so to speak, with a cervix located higher above the promontory than in any case he could find reported, namely, at the third lumbar vertebra 2 The stretching or distension was not, as usual, at the expense of the posterior wall chiefly, helped by contributions from the lateral walls with a squat uterus as a result but was largely from the right lateral wall 3 Failure to recognize this new condition—lateral distension—prevented him from considering liberation of the adhesion in the seventh month 4 Ventral fixation had taken place though suspension had been attempted

Ventral Fixation for Prolapse, Rupture of Uterus, Death

L H, 35, German, married eight years had had four children, the labors were easy, but severe laceration had occurred with a complete prolapse of the uterus and vagina In February, 1899, a famous gynecologist did "ventral fixation, intra abdominal shortening of the round ligaments, and vaginal plastics" At term a tumor was said to obstruct delivery and version and perhaps embryotomy was done After three weeks of sepsis, she was sent in to his service at Brooklyn Hospital, in a sinking condition Peritonitis with extensive exudate surrounded a right sided rent running from external os to cornu, splitting the broad ligament and into the peritoneal cavity, four fingers wide The uterine globe extends half way to the navel, the fundus is fixed to a scar above the pubes and the posterior wall is thin and relaxed The anterior wall is 2 inches thick and runs from the top of the scar half way back across the pelvis, and almost from side to side, even at this late date The patient never rallied

Cesarean Section for Ventral Fixation of Uterus, Death

A delicate patient weighing less than one hundred pounds, had severe dysmenorrhea until after an operation by a celebrated gynecologist four years ago She says that a one inch cyst was removed from the left ovary, and that her womb was "tacked up in place" She was married in October, 1899, in her thirty third year, and last menstruated on January 1, 1900 Nausea began in February and lasted throughout On March 1 there occurred a threat of miscarriage with a marked flow of three days Constipation, with somewhat persistent intestinal toxemia troubled her throughout her pregnancy The kidney action demanded constant stimulation and attacks of headache were frequent In August he found the pelvic measurements ample, and abdominal examination showed the fetus in the right sacro anterior position, of normal size At the right side of the fetus and a little anterior to its highest point, the ovary could be detected, further forward the tube, and still further forward and downward the round ligament swept in the shape of a crescent from the middle of Poupart's ligament upward and forward The distance between the ovary and upper end of the round ligament showed that the cornu was stretched The right cornu being thus thrown forward the left horn was searched for at the same level on the posterior and opposite side of the uterus, but such was the sensibility of the neurotic patient that anything like a satisfactory examination was impossible It was therefore supposed very natural, that one end of the suspensory ligament which bowed this fundus forward was attached below at the scar above the pubes and the other end above at or behind the level of the tube The portio vaginalis was in front of the promontory When she had run beyond term with slight labor pains at times during several days he anesthetized her to make a complete examination and to induce labor by dilating and dragging the cervix forward The right horn of the uterus was as stated high and to the front The left ovary and round ligament, however, instead of being at the same level lay along Poupart's ligament. The external os was crowded against the middle of the

first sacral vertebra A strong double tenaculum was made fast in the anterior lip to pull it downward, and the longest finger was passed into the cervical canal Instead of the usual length of four centimeters, he could pass his finger nearly 10 centimeters into the cervical canal Though unable to reach an internal os the finger tip passed to the first lumbar vertebra The anterior wall facing downward into the pelvic was at least 4 centimeters thick One half hour of persistent effort with the strongest downward traction, the hand in the vagina and the finger in the cervix, failed to reach or stretch or bring forward the internal os He worked to the danger point of rupture No bag would stay within the cervical canal to stretch it Professor Jewett saw her in consultation On the same day no active pains intervening a Cesarean section was done, at Brooklyn Hospital The first child was delivered within 45, the second child within 70 seconds The broad ligaments were seized by Dr Westbrook The first child lay in a right sacral position with its placenta in front of it completely covering the second child which the tension and the sensitiveness of the uterine wall had prevented them from detecting The second child was in the right occipital position with its placenta posterior There was moderately free blood loss from the slackly contracting uterus, and some shock As the incision in the uterus lay in the long axis of the mother's trunk, it ran from behind the right horn diagonally across the fundus to the front of the left horn, the major part of it being necessarily on the rear wall of the uterus The patient was put to bed in fair condition, but died of shock within twelve hours There was no internal bleeding, as demonstrated by the removal of the upper abdominal stitch The girl weighed 5 pounds, 10 ounces the boy 5 pounds, 4 ounces They have gained nearly an ounce a day

Band or Ligament Stretched by Enlarging Pregnant Uterus

As bearing on the matter of ventral suspension and the stretching of the new suspensory ligament made at that operation, and running from the fundus to the anterior abdominal wall, he presented a series of diagrams from a case of adherent retroflexion This case had a slender ligament on the opposite side of the uterus The patient was a delicate little woman of 26, who had been treated with pessaries for fifteen months by a female who has no place in our medical directory, and had ulceration of the vaginal fornix and a peritonitis in the cul de sac A year or more later she became pregnant He drew attention to the way in which the uterus drags on the ligament which fastens the fundus to the cul de sac, to the development of the fetus in the bay window of the anterior wall, and to the final result wherein he showed the uterus in good position at term He knew positively that the ligament was ultimately torn away because, after delivery, the uterus staid forward easily, and because, at a laparotomy ten years later, he found in the middle of the rear wall of the body of the uterus the old depressed scar of that adhesion As a matter of comparison he showed a picture of a ligament as seen six months after operation The patient was a neurasthenic with an aggravated retroflexion of an enlarged uterus and microcystic ovaries As she was but 21, he resected the ovaries at the first operation, March 28 1900 and sutured the uterus to the abdominal peritoneum with three sutures of chromicized gut. October 7, 1900, he did an abdominal hysterectomy for persistent pelvic pain The cause was evident The strip of apparently sound ovary, 5 cm in width, left on each side, had grown to a size greater than that of a normal ovary Moreover, the broad ligaments presented one of the very marked conditions of varicose veins These suspensory ligaments are sufficient to hold the fundus forward, but readily pull away in the pregnancy He had seen the ligaments suspending the uterus in five cases where the abdomen had to be reopened In one a 6 inch ligament allowed the fundus to drop back to the mid sacrum In four it did its work well

In 37 of his cases of suspension whose later histories he had searched he found two pregnancies The first was that of a highly nervous woman of 36, whose retroflexion was corrected by suspension after curetting, repair of cervix and perineum, and anterior colporrhaphy The cystic left ovary was removed and a tiny fragment of the right ovary A year later he had to empty her uterus for pernicious vomiting at the second month The ligament permitted a 3 inch play of the fundus, and the suspension can not be credited with the need of abortion He used two chromic gut sutures, through uterine wall and abdominal peritoneum The second pregnancy was after suspension for fixed retroversion, in a woman of 32 years, who had had one child Both ovaries were resected Pregnancy began three and a half months after operation Now, at her seventh month, the abdominal wall presents two prominences, one above and one below, the scar, and the round ligaments indicate that the fundus is bowed forward, yet the cervix is not high up nor is the anterior wall thickened within the pelvis

DR PAUL F MUNDÉ said that the first case was operated upon by him two years ago She had a complete prolapse and he did an operation that was rather unusual for him, making a broad denudation on each lateral wall and another on the posterior vaginal wall from cervix to vaginal orifice He did this latter because there was a large ulceration present which he did not wish to leave The denudations were closed with sutures, tying them as he went and replacing, at the same time, the vagina and uterus The perineum was closed as high as possible The abdomen was then opened for the purpose of performing uterine suspension Three silk sutures were introduced, one at the fundus uteri, one just below the Fallopian tube, and the third on a level with the round ligaments The round ligaments were also shortened by doubling them upon themselves and stitching them together with chromic catgut sutures The patient made a good recovery and was discharged from the hospital with the uterus and vagina in absolutely normal position

He had seen but one other case of pregnancy after ventral suspension for retroflexion where the woman went on to the fifth month, when intermittent uterine contractions occurred and she miscarried He did not favor ventral fixation or suspension for backward or downward dislocations The case that Dr Dickinson reported was the first of the kind in his experience in which a serious accident occurred from subsequent confinement, and he doubted very much if, in the future, he should not continue to perform the operation which had done him good service for years, that is, the Alexander operation, which he had done in over 300 women and in whom he had seen many a pregnancy and a normal confinement with the uterus remaining in a normal position for this reason and for its almost perfect safety he preferred the Alexander operation to any other method of suspending the movable retro displaced uterus, when the appendages are normal

DR EGBERT H GRANDIN said that it had always seemed to him where a fixation or a suspension was done and the sutures were passed posterior to the fundus of the uterus, that these women, if they became pregnant, would have their pregnancies interfered with and if they went to full term, would have difficult deliveries, because the uterus was placed in an exaggerated position of anteflexion He passes the suture through the parietal peritoneum through the body of the uterus anterior to the fundus, and thence through the parietal peritoneum He wished to secure a suspensory ligament of parietal peritoneum whereby the uterus could undergo normal movements and, in the event of pregnancy, the anterior position not being exaggerated, he had never seen the reason why the uterus should not rise and develop as it should normally and pregnancy progress to term without difficulty This method of lifting the uterus to a higher level and maintaining it there relieves the congestion or varicosities of the broad ligaments, which are necessarily present when the uterus has been retroflexed for years

DR JOSEPH E JANVRIN used two sutures inserted into the anterior wall of the fundus on a level with the beginning of the Fallopian tubes Results have been excellent

DR A PALMER DUDLEY did not believe in ventral fixation, nor in ventral suspension if done in such a manner that it would interfere with Nature He never used a buried suture Nature never intended that the uterus should become fixed,

but that it should be supported, therefore, he supported it, and did so in this manner Two sutures are used, passing them through the fundus of the uterus, scarifying the organ between the two sutures, and then closing the abdominal wound with the same sutures In twenty days he removes the sutures and Nature forms the ligament which suspends the uterus He thought the mistake made in this operation was in using a buried suture that can not stretch or accommodate itself to Nature

Therapeutics

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice Proper inquiries concerning general formulae and outlines of treatment will be answered in these columns]

Hemoptysis

Lemoine, as noted in *Med News*, advises a hot foot bath and purgation with the following combination

℞	Pulv Sennæ		
	Sodii sulphatis, āā	℥ss	16
	Aq bullientis, q s ad	Oi	500

If the hemorrhage is subsiding use only magnesium sulphate

For continuous small bleeding he uses the following

℞	Quininæ sulphatis	gr v	30
	Pulv ergotæ	gr viii	50

M Sig One such capsule every morning

In sudden large hemorrhages, omit the foot bath and envelop the legs in iodized cotton and bathe the hands in hot water to dilate the peripheral vessels He states that perchlorid of iron is useless and ergot not very good, but ergotol may be given hypodermically

Treatment of Neurasthenia

The following outline of treatment has been recommended in neurasthenia

℞	Hydrarg chloridi mitis	gr 1/10	006
	Podophylli	gr 1/4	015

M Sig One such capsule often repeated and followed in the morning with Carlsbad salts

And as intestinal antiseptic the following

℞	Sodii sulphocarbolatis	gr v	30
	Pot permanganatis	gr i	06

M Sig One such capsule before each meal

Or

℞	Sodii sulphocarbolatis		
	Sodii benzoatis		
	Beta naphthol, āā	gr v	30

M Sig One such capsule before meals

Baths, exercise, rest and proper diet complete the cure

To Abort Furuncles

℞	Sodii boratis	ʒi	4
	Acidi boracici	ʒi	4
	Acidi salicylici	ʒi	4
	Pulv acidi tannici	ʒi	4

M Sig Apply the powder, sprinkled upon a yeast poultice to the affected part

The Use of Elaterin in Ascites

A H Bigg, in *Med Record*, states the great benefit derived from the employment of elaterin in combination with suitable adjuvants and correctives He employs the following in removing ascitic fluid

℞	Elaterin	gr 2/3	04
	Strych sulphatis	gr 1/4	015
	Glonoini	gr 1/20	003
	Ext digitalis	gr iiss	15
	Caffeinæ citratis	gr x	66
	Pulv caryophylli	gr x	66

M Ft. cap No x. Sig One capsule every three to six hours

He emphasizes the importance of pushing the treatment until four to six copious evacuations per day are maintained, and until permanent relief is obtained He combines with the elaterin, the heart stimulants in order to avoid the tendency to depression, which very frequently accompanies the active hydragogue cathartics

Treatment of Epilepsy

H Campbell Thomson, as noted in *Month Encyclop of Med* states that when cases will not stand the bromid salts in high doses, because of the resultant toxicity developed, a 10 per cent solution of bromin made up in oleum sesami may be given This emulsion is prepared as follows

℞	Gum acaciæ	℥vi	192
	Olei sesami	℥viii	256
	Syr simplicis	℥ii	64
	Ol gaultheriæ	m xl	2
	Aquæ	℥vi	192
	Add		
	Bromi puri	℥ii	69

66

M Sig One tablespoonful night and morning, increasing as directed

Treatment of Tinea

In tinea involving the scalp in children, the following is recommended as a hair wash

℞	Tinct cantharidis	ʒiss	6
	Tinct capsici	ʒiss	6
	Olei ricini	ʒii	8
	Eau de Cologne, q s ad	℥iii	96

M Sig Use as a hair wash

Or

℞	Sodii boratis	gr xl	2
	Spts camphoræ	ʒi	4
	Glycerini	ʒii	8
	Aq aurantii q s ad	℥iii	96

66

M Sig Use as a wash to the scalp

Treatment of Pulmonary Tuberculosis

The following prescriptions are noted in *Merck's Archives* for constitutional treatment of tuberculosis

℞	Arsenii iodidi		
	Strychninæ sulphatis		
	Hydrarg chloridi corros, āā	gr i	06
	Quininæ sulphatis		
	Iodoformi, āā	ʒii	8

M Ft pil No xl Sig One pill three times a day

Or

℞	Ichthyol		
	Creosoti carbonatis, āā	ʒiv	16
	Glycerini	ʒvi	24
	Aq menth pip	ʒiiss	10

M Sig Ten drops, gradually increased to thirty drops in wine or lemonade three times a day

Mercurial Stomatitis

While a patient is taking large doses of mercury for any length of time, the physician must watch the condition of the patient's mouth, according to Dr C Bruhm in *Berl Klin Woch*, as it is usually in the mouth where the early symptoms of mercurial poisoning are first noticed The patient should be required to rinse and cleanse the mouth frequently If a stomatitis appears, pure tincture of myrrh may be applied to the gums If the stomatitis is severe the gums should be painted with a 3 to 5 per cent solution of chromic acid or a 5 to 10 per cent solution of silver nitrate In some cases it will be found necessary to discontinue the mercurial treatment for a certain length of time

Treatment of Mercurial Sore Throat

A I Liants in *Phila Med Jour*, states that to prevent mercurial angina, the patient should be instructed to wash the mouth with some antiseptic both before and after each dose The sore throat is best treated with peroxid of hydrogen, while the ulcerations should be treated by the applications of silver nitrate, chromic acid and glycerin emulsion of iodoform

Orexin Tannate as a Stimulant to the Appetite

Zeltner in *Phil Med Jour* states that he has obtained

splendid results in more than thirty cases from the use of orexin tannate It was employed in the anorexia of phthisis in thirteen cases and proved very efficacious in most of them In seven cases of uremia there was marked improvement in five The advantage of the tannate over other preparations of orexin is that it causes no burning sensation in the stomach It was given in 5 grain doses twice daily two hours before meals

Orexin tannate is a yellowish odorless, tasteless powder, insoluble in water Its general use is as an antiemetic, stomachic and to increase the appetite It is contraindicated in excessive acidity of the stomach and gastric ulcers

Headache Dependent Upon Ovarian Disease

W Sinkler of Philadelphia in *Sys of Pract Ther*, advises the following

℞	Ammonii bromidi	ʒvi	24
	Ext hydrastis flu	℥ss	16
	Tinct gent comp	℥iss	48
	Aquæ	℥iv	128

M Sig One dessertspoonful three times a day in water

In anemic headaches associated with uterine disorders he states that Hamilton recommends the following

℞	Ammon bromidi	ʒi	32
	Tinct cannabis indicæ	ʒi	4
	Mucilag acaciæ	℥iv	128
	Spts menthol pip	ʒii	8

M Sig One teaspoonful in water three times a day

Treatment of Acne Rosacea with Adrenal Extract

Munro as observed in *Amer Med*, administers adrenal extract both internally and externally to cause constriction of the dilated blood vessels affected Five grain doses of the dried extract are given twice daily and afterward increased to six times a day If giddiness or nausea occur the dose is reduced or the drug temporarily withdrawn Locally the extract is applied as a paint by dissolving one tabloid in a dram of sterilized water and painted on at night after bathing the affected parts The first application causes smarting and hyperemia which soon passes off, leaving the parts anemic In addition the face is bathed in hot water and the following lotion applied and allowed to dry

℞	Sulphuris precip	ʒss	6
	Zinci oxidi	ʒii	8
	Calamini	ʒiii	12
	Glycerini	ʒii	8
	Aq rosæ	℥vi	192

M Sig Apply locally

He states that the object of the above line of treatment is to prevent the formation of pustules This treatment does not apply to the hypertrophic forms of the disease

Treatment of Asthma

The following is recommended by Eshner

℞	Hyoscinæ hydrobrom	gr 1/6	.01
	Strychninæ sulphatis	gr ¾	.05
	Morphinæ sulphatis	gr vi	.36
	Sodii bromidi	ʒvi	24
	Liq potass arsenitis	ʒii	8
	Tinct digitalis	℥iv	16
	Infusi gentianæ comp q s ad	℥vi	192

M Sig Two teaspoonfuls every three hours in water

Treatment of Pertussis

J E Godson, in *Birmingham Med Rev*, states that he has derived marked benefit by the use of creosote vapor as an inhalation He uses it with steam by means of a kettle or steam spray producer by the use of a dry or moist inhaler, sometimes by sprinkling the creosote on a cloth hung up to dry in a room, or by vaporizing over a spirit lamp He has found that the best results are obtained by the continuous inhalation, His method of treatment is as follows Begin with the continuous inhalation of creosote by suspending cloths saturated with creosote solutions, both in the day and night rooms The density can be regulated by varying the number of cloths The chest and upper part of the spine should be treated by counter irritation Good air, warm clothing and wholesome food are necessary

Medicolegal

Nature of Drug Used as Abortifacient if Immaterial—The Supreme Court of North Carolina holds, in the case of State vs Crews, that there was no error in charging the jury that if they believed that the defendant advised and procured a certain named woman to take turpentine with intent thereby to procure her miscarriage, it made no difference whether it would procure abortion or not, he would be guilty, that is it made no difference whether turpentine was a noxious drug or not if the defendant advised the woman to take turpentine with intent thereby to procure her miscarriage he would be guilty At common law it says, the noxious nature of the drug was essential, but under the North Carolina statute the essential ingredient in the offense is the intent with which the medicine, drug, or other thing whatsoever is used The nature of the drug or article is material only as throwing light upon the intent It is no defense even if the defendant could show that the drug would not in fact cause a miscarriage The law deems no experiments in an effort to procure abortion innocent when the jury is convinced that the drug or other article was used with the criminal intent to procure such attempted abortion

Sufficient Information Against Illegal Practitioner—The Supreme Court of Nebraska holds, in Sofield vs State, that the information on which trial was had in this case was not defective in substance although it omitted to state the name or names of the persons upon whom the accused, who was charged with the crime of practicing medicine without a license or certificate so to do, practiced his profession The court holds that the averment that he "did unlawfully practice medicine to divers and sundry persons, whose names are to the county attorney unknown," was sufficient Of course, it says, the county attorney was not required to set out in the information the names of the persons the accused treated, when such persons were unknown to such officer, and he so pleaded in the information The case it explains is distinguishable from one where the information omitted the names of the persons treated, and failed to allege that their names were unknown to the county attorney Furthermore, it holds that an information need not negative the exceptions of a statute which are not descriptive of the offense, and that, therefore the information in question was not defective in failing to contain any negative averment relative to the exceptions contained in section 17 of chapter 55 of the Compiled Statutes of Nebraska bearing on this offense

Physician's Certificate No Shield to Abuse of Writ—A certificate of the attending physician of a child of 12 years of age, who had been sick with the measles, that she had so far recovered that removal from the premises would not injure her health the Supreme Court of Iowa holds, in the case of Bradshaw vs Frazier was not a legal shield in an action for damages for an alleged abuse of process in the execution of a writ of removal in proceedings against her stepfather causing her death the evidence being conflicting as to when the certificate was issued in fact, and as to the examination made by the physician before issuing it The court says that it was proper for the jury to consider it in determining the issues presented, but the court should not say as a matter of law that it was a complete defense Nor does it consider that the contributory negligence on the part of the parents, and on the part of the relative with whom the child remained a few days after the ejectment, if it existed as contended, would be a defense in such a case Without a statute on the subject, it says that there can be no doubt that the law will more carefully guard the health of a human being than it will personal property, otherwise, it would not deserve the respect of the meanest inhabitant of the state

Bills for Services in Cases of Contagious Diseases—The Supreme Court of Michigan holds, in the case of Browne vs the

Board of Supervisors of Livingston County, that, where a physician presented his bill to the board of supervisors as a bill for services rendered to indigent persons, and received an order and money thereon without protest for an allowed smaller sum than the amount of the bill he could not afterward collect the balance claimed to be due him by presenting a bill for services rendered under section 4424 of the Compiled Laws of Michigan in caring for contagious diseases, and crediting thereon the amount received although the services rendered were really of the latter character In the same opinion, but in what may be called the case of O Neil vs the same defendant, it further holds that the duty of examining into each case to which he is called is imposed upon the health officer as one of the general duties of his office by section 4460 of the Compiled Laws of Michigan, and that for determining in such cases whether the patients are affected with a disease dangerous to the public health his compensation is fixed by section 4462 at not less than $2 a day to be paid by the township, city, or village of which he is health officer Section 4424 concerning contagious diseases, does not provide that the costs of these services may be recovered from the supervisors That section covers expenses that are incurred after such determination The question of whether the patient is afflicted with a disease dangerous to the public health must be first determined The expense of determining this is not an expense incurred in taking care of the diseased person If it is determined that the disease is dangerous, then the provisions of section 4424 apply to the case For the former services, the examining into the case the township city or village must pay, for the latter, or caring for a person afflicted with a disease dangerous to the public health the county must pay

Right to Examine Body Does Not Extend to Dissection—Certain policies of insurance against loss through external, violent and accidental means provided that any medical adviser of the company should be allowed, as often as he required to examine the person or body of the assured in respect to the alleged injury or cause of death The question was raised whether this gave the company the right to have the body exhumed and have an autopsy of it after it had been buried or in other words to dissect it The United States Circuit Court, in Kentucky, holds Sudduth vs Travelers' Insurance Company that it did not It does not think that the ordinary and natural meaning of the words referred to when fairly construed would have such a meaning To put it a little differently, it does not think that any ordinary person, in agreeing to the stipulation for an examination of the insured before or after death would suppose he was agreeing to what would have been much more clearly expressed by the word "autopsy" or by the word "dissect" That is to say it does not think that one would ordinarily suppose that the word "examine," as applied to the human body, either living or dead would, by the force of the term, include or by an insured, at least, would be supposed to include, the idea of cutting it up The word "examine" may not definitely express the same idea to every person who sees or who uses it but the court says that it is quite clear to it that it does not in the clause of the contract under consideration in this case include the idea either of an "autopsy" or of a "dissection," if there is any essential difference between those two words in this connection While an autopsy, generally speaking always includes an examination, the court does not think that an examination always includes an autopsy, or that it can be fairly held that the simple word "examine," as used in the policies sued on would be accurately defined in the same words as those used to define either "autopsy" or "dissection" when endeavoring to arrive at the mutual agreement of the parties at the time they were contracting, particularly when construing policies for insurance against death from external causes only and which ordinarily would only involve or require external inspection It may be that the right to dissect a body even after burial, is or would be an important right to the company, but that, the court adds, would make it all the more necessary for it to express it in language in no way ambiguous or doubtful, or which, in order to effect the company s purpose would have to be extended beyond its ordinary import

Current Medical Literature

Titles marked with an asterisk (*) are noted below

American Medicine, May 25

1 *Apoplexy and Hemiplegia Harold N Moyer
2 *A Case of Intermittent Claudication David Reisman
3 Disease and Deformity of the Knee Etiology, Diagnosis and Treatment Daniel W Marston
4 *Chronic Heart Disease in Children relieved by Systematic Movements John Madison Taylor
5 Peripheral Venous Thrombosis in Cardiac Disease, with Report of a Case J A MacGregor
6 *A Hitherto Undescribed Reaction Following the Inoculation of Vaccine Virus A Preliminary Report Heinrich Stern
7 Pregnancy Complicated by Fibroid Tumors Cesarean Hysterectomy at Eighth Month Mary Almira Smith
8 *On the Use of Alcohol in the Treatment of Carbolic Acid Burns and Poisoning F Pirkner

The New York Medical Journal, May 25

9 Hyperacidity (Superacidity Hyperchlorhydria Superaciditas Chlorhydrica) a Clinical Study H Illoway
10 *Nasal Condition Observed in the Aged Beaman Douglass
11 What Route Shall we Adopt in Examining the Eye Muscles? Alexander Duane
12 *Ossiculectomy for Chronic Suppurative Otitis Media J A Stucky
13 The Importance of Early Recognition of Abdominal Infections W D Hamilton
14 Antistreptococcus Serum in Two Cases of Puerperal Septic Infection A J Primrose

Boston Medical and Surgical Journal, May 25

15 *Municipal Care of the Consumptive Poor S A Knopf
16 Echinococcus of Liver and Perforation into the Lungs and Bronchi William F Gay

Medical News, May 25

17 *Some Notes on Medical Diagnosis Wm N Berkeley
18 *The Mineral Waters of Mt Clemens Mich as Viewed and Compared with Those of European Watering Places Richard Leuschner
19 The Treatment of Chronic Purulent Otitis Media James F McKernon
20 *Tuberculosis of the Iris William F Mittendorf

Medical Record, May 25

21 *Orchitis and Epididymitis in Typhoid Fever Francis P Kinnicutt
22 *The Operative Treatment of Umbilical Hernia in Adults Jos A Blake
23 *The Borderland of Insanity Where and What is It? Henry Waldo Coe
24 Recurrent Oculomotor Paralysis Report of a Case with Remarks Wm M Leszynsky

Philadelphia Medical Journal, May 25

25 *The Surgical Treatment of Chronic Ulcer of the Stomach A W Mayo Robson
26 *Late Results of the Treatment of Inexorable Sarcoma with the Mixed Toxins of Erysipelas and Bacillus Prodigiosus Wm B Coley
27 *Trauma as an Exciting Cause of Paralysis Agitans F Savary Pearce
28 Two Cases of Lobar Pneumonia Following Ether Anæsthesia with Unusual Course W S Schley

St Louis Medical Review, May 25

29 The Operative Management of Retro Peritoneal Abscess of Appendicular Origin Gilbert Geoffery Cottam
30 *Dr Gaylord s Cancer Parasite—A Criticism C Fisch
31 Antitoxin in Diphtheria Robt F Amyx

Cincinnati Lancet-Clinic, May 25

32 *Gonorrhea in Women Can its Frequency be Lessened? J Ambrose Johnston
33 *What is the Significance of Cervical Lacerations Some Points Connected with Their Treatment Chauncey D Palmer
34 A Case of Locomotor Ataxia Mark A Brown

University of Pennsylvania Medical Bulletin (Phila), May

35 *A Trimanual Method of Percussion for the Detection of Cystic or Loculated Fluids in the Abdomen John G Clark
36 *Recent Statistics on the Primary and Ultimate Results of Hysterectomy for Cancer of the Uterus John G Clark
37 Diagnostic Curettage of the Uterus Brooks M Anspach
38 A Unique Case of Sarcoma of the Uterus Associated with Fibroma of the Inguinal Canal John G Clark
39 Unique Pathological Changes in Two Cases of Uterus Bicornis Unicollis 1 Unilateral Prometra and Prosalpinx 2 Myoma. John G Clark

40 *A Practical Application in Abdominal Surgery of Scientific Investigations on the Function, Anatomy and Pathology of the Peritoneum John G Clark

New York University Bulletin of the Medical Sciences, January

41 *Gelatin as a Food stuff Graham Lusk
42 *On a Method of Balancing the Acids and Bases of the Urine for the Recognition of the Pathologic Excretion of Organic Acids and the Approximate Determination of Their Amount C A Herter and A J Wakeman
43 The Alloxuric Bodies Their Origin and Estimation John A Mandel
44 *A Few Experiments Upon the Effect of Low Temperatures and Freezing for Various Periods of Time on Typhoid Bacilli and Other Varieties of Bacteria Wm Hallock Park
45 The Development of the Conception of Disease Horst Oertel
46 A Brief Report of Two Interesting Cases of Bacterial Infection of the Urinary Tract Wm H Park and Robert J Wilson

American Journal of Obstetrics (N Y), May

47 A Visit to the Wards of the Promaternity Hospital A Vision of the Twentieth Century J W Ballantyne
48 *Infant Feeding Henry Dwight Chapin
49 *Results of Treatment of Cancer of the Cervix, and the Unreliability of Statistics on the Same J M Baldy
50 *A Flap Operation for Atresia of the Vagina George H Noble
51 Muscle cell Sarcomata of the Uterus William H Weir
52 Report of Two Additional Cases of Rupture of the Symphysis Pubis During Labor Joseph B De Lee
53 Points of Similarity and Dissimilarity of Croupous Pneumonia and Pulmonary Tuberculosis in Young Children Samuel S Adams
54 Cyclic Vomiting George N Acker
55 Ovariotomy in the Eightieth Year Wilmer Krusen
56 Varicocele of the Broad Ligament John B Shober
57 A Case of Infective Fever Resulting in Premature Labor, Peritonitis and Death John H Girvin
58 *Some Recent Operative Work for the Relief of Prolapse of the Uterus and Bladder I S Stone
59 Dermoid and Other Cysts of the Ovary Samuel W Bandler

The Providence Medical Journal, April

60 Diagnosis Between Appendicitis and Typhoid Fever Maurice H Richardson
61 The Relation of Mental Content to Nervous Activity E B Delabarre
62 The Disagreement between the Physician and the Pharmacist John E Groff
63 The Dangers of Some Common Eye Diseases if Not Properly and Promptly Treated V L Raia
64 Nitrous Oxid Anesthesia in General Surgery Albert H Miller
65 Appendicitis at the Rhode Island Hospital 1891 to 1900 Donald Churchill

Canadian Practitioner and Review (Toronto), May

66 *A Case of Primary Abdominal Pregnancy J E Pickard
67 History of a Case of Smallpox J Godfrey
68 Diphtheria vs Acute Follicular Tonsillitis John Gunn

The Post-Graduate, May

69 The Operation of Litholapaxy James Pedersen
70 Typhoid Fever in Children Henry Dwight Chapin
71 Artificial Respiration Thomas E Satterthwaite
72 Report of Clinic—Hernia, etc Dr DeGarmo

Buffalo Medical Journal, May

73 *Experiences with the Recent Epidemic of Rabies in Buffalo, N Y Ernest Wende
74 *Rabies Mazyck P Ravenel
75 Notes upon the Rabies Epidemic in Rochester with a Report of a Verified Death from Hydrophobia George W Goler
76 Toxemia of Pregnancy Montgomery A Crockett
77 A Brief Résumé of the Grosser Animal Nature and its Application in Medicine (Concluded) G N Jack

Western Medical Review, May 6

78 Endothelioma (Adenoma) of the Base of the Tongue Simulating a Stuma of the Tongue J E Summers Jr
79 Analgesia from Spinal Subarachnoidean Cocainization John B Murphy
80 Psoriasis E J Angle
81 *Facial Paralysis J M Aiken
82 The Need of More Thorough Physical Examination of the Abdomen Wilson O Bridges
83 Compensation and Failure of Compensation in Heart Disease Millard Langfeld
84 Cretinoid Myxedema or Arrested Development Causing Degeneracy Treated by Desiccated Thyroid M H Evans
85 Two Cases of Appendicitis of Unusual Course Herman E Pearse

Richmond Journal of Practice, April

86 Pathology of Diseases of the Liver M D Hoge, Jr

Annals of Gynecology and Pediatry (Boston), May

87 Malignant Disease of the Breast J Collins Warren
88 *Pregnancy and Tuberculosis M Samuel Bernheim
89 Chronic Laryngitis in Children J L Goodale
90 *Nausea and Vomiting During Pregnancy J Richard Taylor
91 Empyema Frederick G Smith
92 Emergency Hospital at the Pan American Herbert Shearer
93 The Nature and Treatment of 'Weak Back in Women Charles W McIntire

The American Practitioner and News, April 1

94 The Progress of Surgery in the Nineteenth Century Wm O Roberts
95 The Causes of Death after Abdominal Operations Louis Frank

St Louis Courier of Medicine, May

96 The Mesogastrium—Omentum Majus (Concluded) Byron Robinson
97 *Our Daily Bread George Homan

Annals of Otology, Rhinology and Laryngology (St Louis), February,

98 *Myxoma of Larynx Joseph S Gibb
99 A Case of Primary Tuberculosis of the Nasal Septum William L Ballenger
100 *The Treatment of Laryngeal Tuberculosis at the Montefiore Home for Chronic Invalids (N Y) J W Freudenthal
101 *Laryngeal Tuberculosis J Homer Coulter
102 Acute Edema of the Larynx Report of a Case Franck C Todd
103 *On the Use of Camphorol, Menthoxol in Diseases of the Ear F C Hotz
104 An Exceptionally Large Myxofibroma (Occupying the Naso and Oro Pharynx and Having its Origin in the Posterior Third of the Middle Meatus) Redmond Payne
105 A Case of Sternutation Dr Mosse
106 Opacities of the Vitreous and Retinal Detachment Following Ethmoido frontal Sinusitis Dr Broeckaert

American Gynecological and Obstetrical Journal (N Y), May

107 Chronic Appendicitis Willis E Ford
108 *Vesico vaginal Fistulæ M C McGannon
109 *Uretero vesical Implantation—Three Cases J F Baldwin
110 *The Streptococcus in Gynecology Guy L Hunner
111 Spinal Anesthesia in Cases Strongly Contraindicating General Anesthesia—A Report of Five Cases Andrew J Downes

Cleveland Journal of Medicine, May

112 Empyema of the Gall bladder Dudley P Allen
113 *The Physical Characteristics of the Pneumonia of Influenza George W Moorehouse
114 A Case of Embolism of one of the Right Lenticulo Optic Arteries Complicating Pneumonia, with Autopsy Charles J Aldrich
115 Lead Poisoning Hubert L Spence
116 A Case of Cardiopulmonary Murmur Illustrating the Importance of Differentiation P Maxwell Foshay

Occidental Medical Times (San Francisco), May

117 Diagnosis of Renal Calculus F B Carpenter
118 *The Medical Treatment of Renal Calculus Wm Watt Kerr
119 *Remarks on the Surgical Treatment of Renal Calculus Emmet Rixford
120 Surgical Treatment of Rachitic Deformities S J Hunkin
121 A New and Convenient Arrangement of Bifocal Lenses George H Powers

Memphis Medical Monthly, May

122 Gall Stones A Report of Seven Cases Frank D Smythe
123 Some Notes on Antitoxin—Diphtheria and Streptococcus C M Sebastian
124 Report of Cases from the Eye and Ear Service of the City Hospital (Panophthalmitis etc), January and February 1901 E C Ellett
125 Acute Catarrhal Enteritis D M Hall
126 Bronchitis B T Bennett
127 Report of Three Cases of Acute Infantile Spinal Paralysis (or Poliomyelitis) J G Pou
128 Treatment of Diseases with Static Electricity W T Watson

Journal of Cutaneous and Genito-Urinary Diseases (N Y), May

129 Annular Lichen Planus the Report of a Case of the "Ring formed Papule with its Histopathology Martin F Engman
130 *Mercury in the Treatment of Lichen Planus—Report of Seventeen Cases—Disease Regarded as a Syphilide Thurston G Lusk
131 *Condylomata Acuminata Linguæ (Venereal Warts of the Tongue) M L Heidingsfeld
132 Diverticulum of the Bladder Accompanied by Persistent Bacteriuria George Knowles Swinburne
133 An Apparent Case of Varicella in Utero Joseph Grindon

The Medical Herald, May

134 A Case of Ectopic Pregnancy Enos Mitchell
135 Faculty Address at Commencement of Ensworth Hospital Medical College at Tootle's Opera House March 18, 1901 P I Leonard

136 *Clean Surgery versus Mutilating and Unscientific Obstetric Procedures as Practiced Upon the Viable Unborn Infant J E Summers Jr

Medical Dial, May 1

137 Report of Cases (Syndactylism etc) Charles W Williams
138 *The Hospitals of Japan Edward C Register
139 Some Practical Points in the Surgical Treatment of Dysmenorrhea Southgate Leigh

Southern Medical Journal, April

140 Chronic Ulcers A Clinical Report J W P Smithwick
141 Opium Poisoning Treated with Permanganate of Potassium Eustorjol Calderon
142 The Medical Treatment During the Adolescent Period Edwin Rosenthal

Georgia Journal of Medicine and Surgery, May

143 Internal Derangement of the Knee Joint with a Report of Two Cases of Removal of the Internal Meniscus or Semi Lunar Cartilage George Ryerson Lowler
144 Medical Supervision of Schools and School Children Edgar J Spretling
145 Report of an Unusual Surgical Case (Complicated Fracture of Leg) Hugh Burford
146 Ophthalmia Neonatorum from the Standpoint of the General Practitioner M L Currie
147 Hypertrophic Elongation of the Cervix Uteri with Complete Eversion of the Vagina from Fibroid Tumor of the Cervix Restoration by Supravaginal Amputation of the Cervix and Inversion of the Vagina George Henry Noble
148 Prognosis in Chronic Non Exudative Nephritis Norman C Varian

AMERICAN

1 **Apoplexy**—The definition of apoplexy is discussed and the common use of the term criticised by Moyer The importance of distinguishing cerebral hemorrhage from thrombosis and embolism from a practical point of view is emphasized and their diagnosis pointed out It is impossible in many cases to distinguish between the conditions When in doubt, treat the case carefully, avoiding those measures which may do more harm than good, and he strongly condemns the use of strychnin and ergot The diagnosis, he points out, will depend largely on the previous history, the suddenness of the attack, the co existing conditions etc

2 **Intermittent Claudication**—This disorder, first mentioned by Charcot, consists of an intermittent inability to walk, due pathologically to a deficiency in circulation, largely connected with obliterative endarteritis of the peripheral arteries Its etiology coincides largely with that of arterial sclerosis, which is the principal anatomic condition found in the disease, but as arterial sclerosis is common and intermittent claudication rare, other factors must take their part, and these are presumably vasomotor disturbances, which may in turn be connected with endarteritic changes in the vasa nervorum The majority of patients with this intermittent claudication are Hebrews and excessive users of tobacco After reporting a case, Reisman suggests as treatment a diet largely vegetable, exclusion of alcohol, tea, coffee, etc, the use of alkaline mineral waters, moderate exercise, avoidance of fatigue, protection from cold and dampness, galvanism, and for drugs iodids and nitroglycerin and cardiac stimulants of the strophanthus order His case was benefited by the use of bromids and nitroglycerin

4 **Chronic Heart Disease in Children.**—Taylor gives the details of his experience in the treatment of chronic heart disease in children, especially noting the fact that in many cases apparently hopeless conditions may be no detriment to a long life, and that much may be done to restore cardiac activity, as is shown by the results of training Physicians are often ignorant on these points, and often give worse advice than practical trainers What is true of boys is still more true of girls, who have a complex circulatory apparatus made for special strain during periods of gestation The advantages of the exercises are the prevention of congestive developments in the liver kidneys and lungs keeping up the functions of the skin and of the nervous system and generally assisting in healthy metabolism While he believes in rest in bed in marked cardiac disorders he believes that when the condition improves there comes a time when some activity may be commenced under guidance and rule, preventing irregular and damaging results No harm can come from employing certain systematic procedures, passive movements by the operator twice a day when absolute rest is still required, and as the condition improves the use of gentle massage of the limbs, and later of the trunk, twice or thrice a day Still later forced breathing to exercise the diaphragm and lungs, teaching the child to lift the shoulders and make them flexible by placing the clasped hands on top of the head and making repeated efforts at raising and lowering the scapular muscles While still lying on the back, active extensions of the limbs in different directions may be made, and as the condition improves the operator may meet these extensions with a certain amount of increasing resistance watching the effect, however, on the pulse and circulation Later the child may be allowed to sit up and the exercise carried still further Neck exercises are of great advantage, moving the head, and the muscles of the upper thigh and hips should receive special attention in cases of weak heart and lungs Later more complex movements suitable for more vigorous children may be employed

6 **New Vaccine Reaction**—A new reaction recently noticed by Stern consists in the improvement following vaccination in lithemic and rheumatic disorders He found this out at first accidentally and then looked up a number of other cases where the same results occurred Later he vaccinated, with their consent, two more sufferers from lithemia, the vaccination not being necessary as a protection from smallpox, and in both with benefit All the cases had one symptom in common, pain, though they were, clinically speaking, cases of uricacidemia, rheumatism and neuralgia, and he thinks there is enough evidence that the vaccin virus had a positive influence He suggests as an explanation that the reaction is a secondary one The system in its endeavor to rid itself of the virus develops increased oxidizing qualities He admits the possibility that the symptoms may be due to bacterial activity, and the reaction also to the influence of cytorhyctes variolæ, the variola vaccina sporozoa He does not offer these facts as showing that vaccination is a specific for pain, for it is not, but simply to call attention to its possible occasional influence

8 **Carbolic Acid**—Pirkner reports a case of a child who swallowed a tablespoonful of pure carbolic acid He was called in about half an hour after the dose was taken, and administered absolute alcohol, which apparently relieved the child, but was too late to cure it entirely He thinks, however, that this case alone is sufficient evidence of the antidotal effect of alcohol on the amount of carbolic acid that remained in the child's stomach when it was given He suggests that there may be a possible danger in the use of alcohol when a certain amount of carbolic acid has been absorbed, and he would advise under similar conditions not to repeat the dose of alcohol if it can not exert its specific effect because of the large amount of chemically unchanged carbolic acid in the circulation

10 **Nasal Conditions in the Aged**—Douglas has examined with special care all cases above 45 years of age which came under his observation in his clinics and finds a surprising number of cases with nasal pathological conditions, which are not shown by any subjective symptoms Five cases are reported He theorizes on this phenomenon and suggests a possible explanation It would appear, he thinks, as if nasal symptoms were not so much caused by these pathological conditions as by associated ones of disturbed circulation and nerve irritation This draws our attention to the fact that chronic congestive interference with circulation, lymphatic obstruction and neurotic temperament are very important factors in nasal cases, and the symptoms may not disappear with the mere mechanical removal of the lesions

12 **Ossiculectomy**—The anatomical construction of the middle ear favors pathological conditions, and the question arises whether in view of the great importance of these conditions radical conservative treatment is most advisable. Stucky has removed necrosed ossicles in twenty nine cases with results justifying the operation In only two of these was the

stapes removed The treatment outlined is as follows After removing the ossicles and all or part of the tympanic membrane and having the cavity thoroughly curetted, the anterior attic wall is removed and we have free drainage and can make remedial applications which could not otherwise be done He thinks this is the most conservative and satisfactory procedure and better than the radical surgical treatment, at least as a first resort

15 **The Consumptive Poor** —Knopf reviews the statistics of the mortality of tuberculosis, and calls attention to the fact that consumption is not a hopeless disease, though in the unhealthy conditions of the city tenements, its prognosis is bad The condition, also, of the poor in cities is especially unfavorable to recovery He points out the economy of early care in these cases, and insists on the educational advantages of sanatoriums in a hygienic way He thinks there is little danger of such institutions diminishing the value of real estate, and gives an instance where the opposite result occurred

17 **Medical Diagnosis** —Berkeley reviews the various points in regard to diagnosis, the importance of the instruments of precision, and of the use of the microscope, the avoidance of brilliant snap diagnoses, which he thinks are risky, the necessity of close rigid examination, which he goes over in detail, and finally the need of logical judgment from the facts obtained The details of the article are numerous and the reader is referred to the original

18 **Mt Clemens Springs** —The medicinal waters of Europe are noticed many of them in more or less detail, and compared with those of Mt Clemens Leuschner claims that the latter have the combined properties of the waters of Aix la Chapelle, Wildbad, Kreuznach, Oeynhausen and Nauheim He maintains that with the scientific management of the waters of Mt Clemens, many if not all the benefits obtained in these other localities would be readily obtained He shows how absorption takes place through the skin and into the general circulation, and the concentration of the Mt Clemens salines is a distinct advantage The value and efficacy of the Mt Clemens sulpho iodo bromo salines have been amply established in rheumatic, gouty and syphilitic conditions, and skin diseases, nervous disorders, alimentary catarrhal affections, diabetes, etc

20 **Tuberculosis of the Iris** —The different forms of iris tuberculosis are described by Mittendorf, who finds it sometimes a primary and sometimes a secondary affection, which may be divided into two classes, the solitary and multiple forms, and the latter may be divided again into chronic and acute As a rule, it is a disease of youth or middle life, and one eye is usually alone affected In the first class described there is generally tuberculosis in the general system, not necessarily, however, of the lungs and it is characterized by one or more grayish nodules developing in the iris, early appearance of ciliary injection and intense pain in the eye and forehead, and synechiæ The disease rapidly advances and the vision becomes impaired, the humors become turbid, the whole eyeball may become filled with tubercular matter and enucleation is likely to be required Another form occurs in the early stages of pulmonary tuberculosis, and runs a much slower course It may last several months, and be entirely relieved with the general improvement of the patient The third form is more serious, and usually leads to great impairment of the vision and loss of the eyeball There is a single tubercular deposit at the bottom of the anterior chamber, involving the ciliary body, which is very painful, and as the tumor develops it presses on the cornea, which soon breaks down Even this disease, however, may yield to treatment, and partial recovery from the disease be obtained As regards treatment, he thinks hot water applications better than cold Morphin may be required Iridectomy may be suggested, but he does not think it promising as an operative measure, and if the disease appears resistant after the usual internal and local measures, very often a complete removal of the affected eye is advised While this may not prevent the infection of the other organs, it removes the principal cause of the danger and relieves pain A strong solution of atropin is advisable, and it counteracts to some extent the effects of the morphin given to relieve the suffering Three cases are reported

21 —See abstract in THE JOURNAL of May 18, p 1415

22 **Umbilical Hernia** —After reviewing the various operations and the conditions which require them, the author remarks that slitting the sheath of the recti and union in several layers is the best for small hernia Of the various methods of doing this, he thinks lapping the abdominal wall is the method particularly applicable in cases where there is stretching of the linea alba with separation of the recti It consists of the division of the linea alba above and below the sac in the median line for the necessary distance, with or without incision of the ring and a portion of the linea alba The entire wall on one side is then lapped in front of the other and there sutured, so that the ventral surface of one side is in contact with the dorsal surface of the other This method has been tried by him in three cases since last September, and he credits the earliest record of this operation to Sapiejko, in December, 1898 Some of the more apparent advantages of the operation are 1, the doubling of the abdominal wall at the hernial site, 2, the breaking of the lines of suture, 3, the broad surfaces for union, 4, the obliteration of the separation of the recti, and the reduction in the size of the abdomen Its field is really not limited to herniæ proper, but also includes the treatment of pendulous abdomens, and of enteroptosis due to laxity of the abdominal wall

23 **Borderland of Insanity** —Coe's article is a general review of the early manifestations of mental derangement, when the condition has hardly developed into acute alienation Under this head he classes insomnia, eccentricity, lack of control of emotions and passions, imperative conceptions when they go beyond the safe degree, obsessions, and sexual aberrations and excesses to which he gives considerable space

25 —See abstract in THE JOURNAL May 25, p 1491

26 —See extract in THE JOURNAL, May 25, p 1490

27 **Paralysis Agitans** —The effect of commotio cerebri as a cause of definite organic changes in the neuron has been brought to Pearce's attention in a case of Friedreich's disease, and he has noticed also conditions of tremor in cases not otherwise hysterical recovering after rest and nutritional measures He has been led to suspect, therefore, that disorganization of the glia and neurons arise from undue commotion in the nerve centers He brings up paralysis agitans particularly as a disease of indefinite pathology, though interstitial plaques of sclerosis and hardening of the blood vessels are known to occur and he says he has no doubt that not a few cases of this disease date their onset of actual tremor from the time of a fall or other concussion He would say that the older the case, the more likely is trauma to be its cause, and even senile tremor may date from an injury Thus excitation of the afferent axons may cause an increase of irritation of motor neurons the reflex message being carried back accentuated, producing tremor of the muscles, and therefore of the extremity involved Two cases are reported, which seem to him to illustrate his views, and he says The conclusions which seem to be the more definite as regards trauma as an exciting cause of paralysis agitans, are that the later the origin of the disease is trauma more apt to have been the exciting cause, in any event it is more apt to produce an aberrant type of the malady, especially when the insult to the nervous system has been primarily in the periphery of the body rather than of the central neurons

29 —See abstract in THE JOURNAL, Jan 12, p 128

30 **Gaylord's Cancer Parasite** —Fisch criticizes Gaylord's paper and work, declaring his methods faulty and his results inconclusive and unsatisfactory He says he would advise him to search for the same body in young granulated tissue and if he then uses the old safranin gentian method or Fleming material, or one of the more recent methods of Benda, he thinks he will not hear again of the parasite

32 **Gonorrhea in Women** —Johnston reviews the facts showing the dangers of this disease and calls attention to the

importance of educational methods in combating its extension

33 **Cervical Lacerations**—The dangers of lacerations of the cervix from hemorrhage sepsis, etc, during or shortly after parturition, the delayed involution which is induced in these cases, the dangers of cicatricial tissue becoming malignant, are considered by Palmer He advises a primary trachelopl astic operation which he thinks is one of the most satisfactory operations in surgery He suggests that it is possible that more deliberation in labor cases, and the avoidance of unnecessary interference with instruments, etc, may be effective in diminishing the frequency of these injuries The importance of their early recognition at the time of their occurrence, and their correction at this time are dwelt upon, and he also calls attention to the frequency of imperfect results like for example the want of restoration of normal symmetry in the operation, the production of artificial stenosis, and the leaving of unhealthy cicatricial tissue

35 **Trimanual Abdominal Percussion**—For the detection of blood in obscure cases, Clark has employed for two years past the trimanual method which he here illustrates On bimanual examination of the pelvic mass of questionable consistence the intestines intervening between the anterior abdominal wall and tumor may dissipate the percussion impulse of the abdominal hand, and although fluid may be present, a wave of sufficient intensity to be felt by the vaginal touch is not induced To overcome this difficulty the tumor mass should be confined as closely as possible between the two examining hands, while the percussion is made by an assistant With light taps even small collections of fluids may be detected by the quick responsive, pulsatile wave passing from the abdominal to the pelvic mass He has systematically employed it in the differential diagnosis of abdominal tumors He finds this method of singular value and has looked in various text books to see if it has been hitherto described, but finds no mention of it

36 **Uterine Cancer**—The statistics from various series of the results of hysterectomies for cancer of the uterus are studied by Clark and he concludes that any operation, no matter how grave it is which offers the highest percentage of cures is advisable He does not think glandular metastases as frequent as he formerly considered them, and while he believes that the glands should be removed, he thinks the condition of the patient should be considered beforehand His rule, therefore, is to complete the chief part of the operation, viz, hysterectomy, and then, if the patient's conditions justifies, the iliac glands may be dissected out Even then he thinks the removal of prognostic rather than of curative value, for if they are involved he does not think the patient will escape a recurrence of the cancer but if they are free a favorable opinion can be given Suspicious cases of hemorrhage about the menopause should not be allowed to go longer than one month at the most without a thorough examination If an early diagnosis is made and operation performed we have a greater per centage of cures It is only by careful microscopic examination of curettings that a definite decision can be made

40 **Abdominal Surgery**—The researches of various authors on the anatomy, physiology and pathology of the peritoneum are first noticed by Clark who gives a rather full abstract of the comparatively recent article by Wallgren in regard to streptococcal infection of the peritoneum, and sums up the following as the most important practical points contained 1 Great decrease in the number of micro organisms within an hour, both through their intraperitoneal destruction and through their rapid absorption into the general system where they are dealt with There is therefore, no possibility of limiting septic matter through gauze or glass drainage to any free surgical field within the abdomen 2 Vigorous streptococci which remain behind develop within six hours a repellant or destructive quality for leukocytes, and the lethal fight is therefore inaugurated and well underway before drainage as ordinarily employed can possibly exercise any beneficial action In many cases, therefore where drainage is employed the patient recovers in spite of and not because of it. Based upon practical experience in a large series of abdominal sections, and sustained by his own and the above detailed scientific investigations, he believes, therefore, that the thorough irrigation with normal solution of the peritoneal cavity after abdominal operations for the purpose of removing all possible débris of infectious matter, and then leaving behind large quantities of salt solution, is the most effective preventive measure we have against post operative peritonitis

41 **Gelatin as a Food Stuff**—Gelatin is recommended by Lusk as an accessory food stuff in diseases where there is a high tissue waste, since it protects the body from too large a proportion of proteid waste Small quantities are nearly as beneficial as larger ones It can never be fully substituted for proteid food

42 **Acids and Bases of Urine**—The term balancing the acids and bases of the urine as used by Herter and Wakeman refers to determining the basic values of the chief known bases of the urine and comparing them with the corresponding basic values of the chief known acids of the urine, thus demonstrating the departure from the state of health as shown by failure of the known acids to balance the known bases, or the excessive bases, in case of acid intoxication The method is described in detail with formulæ which can not be reproduced, and the reader is, therefore, referred to the original

44 **Low Temperatures and Bacteria**—Park has experimented with typhoid bacilli in ice at different periods, also in liquified air, and gives the results The practical points appear to be that these and probably some other bacilli are capable of retaining their virulence and vitality for considerable time in a condition of extreme cold The bacilli of typhoid patients thrown out with disinfection might easily be infectious until spring and typhoid bacilli after a thaw be carried in water for long distances It is difficult to say just how long ice from infected water may remain dangerous, but the longer it remains frozen the less the danger In spite of the rather rapid purification due to freezing, we should discourage the use of ice from infected water unless it remains frozen for at least five months After mid summer one could rule out ice infection from natural ice absolutely unless contaminated in shipping Liquid air seems to diminish rapidly the living activities of typhoid, colon and hay bacilli and staphylococci, the last two however, having greater resistance than the two first

48 **Infant Feeding**—Two questions to be answered are 1 How can we get cow's milk which is clean? and 2 how can we modify it to have it resemble mother's milk? About 200 species of bacteria have been grown on milk and about 20 produce lactic fermentation The accurate differentiation of all these bacteria is impossible, but they can be broadly divided into lactic acid forms and saprophytes The pathogenic bacteria are introduced through water used in cleansing the vessels or through persons handling the milk Lactic acid bacteria come from the teat and the first few streams of milk contain the largest number it is best to throw these away The putrefactive bacteria come from the manure on the udder or teats of the cow which should be kept as clean and disinfected as they can be Chapin remarks that there is a great amount of unnecessary fear about tuberculosis in milk Tubercle bacilli, he says, do not grow well in milk, and while the disease may be attributed to it the fear has been greatly exaggerated When the milk has been collected with all the necessary precautions as to the washing of the cow and cleanliness of the milker and utensils, it should be rapidly cooled, as microbes do not grow readily in milk below 50 F Last summer milk was collected in Illinois, New Jersey and New York, rapidly cooled, aerated and sent to Paris and drank there during the Exposition as better than that produced near at hand When we get a clean milk we are on the right way, but anything that masks the effect of the dirt in the milk is bad The two principal chemicals are boric acid and formaldehyde Pasteurization is not always a good practice and the author never employs it excepting in very hot weather when he can not be sure of the milk The approximate difference between human and cow's milk is stated and details given as to changes that are required The milk should be put into the bottles in

the dairy, and not in the shop in town, and the less it is handled the better If it is kept from 12 to 24 hours nine tenths of the butter fat is on top, and this is an aid to dilution He objects to the use of the siphon and believes in the use of the dipper The different kinds of cows and the quality of their milk are discussed The Guernseys and Jerseys give 5 per cent butter fat, the average grade 4 per cent butter fat, and the Holsteins and common stock 3 per cent It is better to get the average from twenty or thirty cows rather than the milk from one, and he is just as willing to use the 3 per cent milk as the 5 per cent, as it is more uniform The details of making up the proper dilution are given and tables to aid in the estimation He thinks the less we manipulate the milk for the baby the better, and objects to centrifuging to get thick cream, the use of gravity cream and the dipper is better There are two types of milk, the hard curdling and the soft curdling milk Cow's milk is of the hard curdling and woman's is of the soft curdling type This is the great difference to be borne in mind Decoctions of cereals like barley water or wheat flour gruel are effectual diluents, better than simple water He generally orders his gruel to be made as follows Two tablespoonfuls of wheat or barley flour, made into a paste with cold water and added to a quart of water then boiled for fifteen minutes, and with a little salt we have ordinary gruel Wheat is as good as barley, though barley may be better if the baby has diarrhea For constipation use oatmeal gruel He dextrinizes this gruel, preparing his own diastase by taking a tablespoonful of ordinary malt barley in a teacup with about two tablespoonsful of water and put in the refrigerator over night In the morning one tablespoonful of thin fluid that looks like tea is taken off, and contains active diastase After putting it into the gruel, in a few moments you can see it become thin It should be put in after it is cool enough to taste When it stands it separates into the clear, which is soluble starch, and the part underneath cellulose In this method we have a sufficient aid to digestion of cassein of cow's milk, which makes the hard curd soft and flocculent and the nutritive value is improved by the digestion of starch But diastase can be bought if desired, and he has used a preparation, cereo, a glycerite of diastase, one teaspoonful of which will digest a pint of gruel or a saucer of oatmeal in five minutes This does away with the objection of those who say a baby was not meant to digest starch, neither was a baby intended to digest cow's milk

49 **Cancer of the Cervix**—Baldy says this disease is universally conceded in its inception to be a local one and the hope of a cure rests in an early removal of the disease In spite of the extravagant claims of surgeons, especially the Germans, the results have not been so good Kelly's work in the Johns Hopkins Hospital, as reported by Cullen on cancer, bears out this conclusion It is claimed by these statistics that about 20 per cent of patients out of a total of 73 are cured This means, of course, 20 per cent of those operated upon In studying the tables, however, it appears that 68 patients of cancer of the cervix have been refused operation In other words the cases have been picked cases The percentage then drops at once to about 10 per cent Including in this every case of possible false diagnosis and doubtful or borderline cases, and so on, the 10 per cent falls away He thinks, therefore that the statistics of the Johns Hopkins Hospital show a cure of 5 per cent or less, accepting them at their best This is in accordance with Baldy's own experience

50—This article was abstracted in THE JOURNAL, xxxv, p 1426

58 **Prolapse of the Uterus and Bladder**—This condition is, according to Stone often ignored as regards its treatment, which he thinks is a great mistake and due to the want of appreciation of existing pathologic conditions and the necessary utilization of changed structures in the tissue for their relief Our first aim should be to prevent the descent of the uterus and bladder The recto vaginal fascia and that between the uterus and bladder, and bladder and vagina, is always permanently over stretched in bladder prolapse He compares this pelvic outlet with the inguinal ring and divides it into two planes, corresponding to the external and internal abdominal ring The upper contains the anterior surface of the broad ligament and the lower what is called the pelvic floor The operation proposed by the author is described as follows After the patient has been prepared for the operation and placed in the lithotomy position he incises along the median line at the crest of the cystocele through the thickness of the vaginal wall This incision, if about 2 inches in length, gives ample room, and can be enlarged if desired The thickness of the wall can be easily estimated and can be divided with the scissors without fear of cutting into the bladder The sides of the incision are caught with forceps and pulled apart, when the white cellular tissue shows, and the separation may be continued With a gauze sponge we can rapidly separate the flaps from the bladder as far on each side as may be required In prolapse of that portion of the vaginal wall under the urethra, a free hemorrhage can be avoided if we do not separate them too far laterally There is a most satisfactory use of this method in loss of control of the neck of the bladder The operation in such cases is merely removing the urethrocele, and results excellent as far as his experience extends The incision extends the entire distance from the meatus to the cervix uteri when we operate for prolapse of the bladder When the bladder is pushed away from the vaginal wall through a short incision first made, the opening may be extended at will with the scissors and the bladder pushed beyond danger of injury With two pairs of forceps he holds the edge taut and can see how much tissue can be removed In a case prolapsed sufficiently to allow the uterus to reach the floor of the pelvis or the cervix to nearly reach the uterus, we may expect excellent results after this operation without opening of the abdomen or resorting to utero suspension or fixation He gives diagrams showing the relative position before and after operation of the vagina and bladder, the latter being folded over on itself to a certain extent

66 **Primary Abdominal Pregnancy**—In the case reported, Pickard claims to have found the child fully developed, weighing 8½ pounds in the abdominal cavity with normal uterus, the ovaries and the Fallopian tubes normal and intact and no signs that the ovum had ever entered the Fallopian tubes or that the pregnancy had ever been tubal He concludes that he had in the case reported a primary abdominal pregnancy

73—This article appeared in THE JOURNAL of April 6, p 940

74 **Rabies**—Ravenel gives the history of rabies and also the discovery of the lesions in the ganglia by Van Gehuchten and Nelis, which he thinks is one of the most important facts in the history of the disease He ends his paper with the following conclusions which he thinks are justified 1 When present, the capsular and cellular changes in the intervertebral ganglia, taken in connection with the clinical manifestations, afford a rapid and trustworthy means of diagnosis of rabies 2 That when these changes are not present it does not necessarily imply that rabies is not present The lesions afford contributory evidence more or less valuable, depending on the duration of the clinical manifestations 3 That in certain cases when the capsular changes are slight, such as in animals dying or killed in the early stages of the disease, the changes are more marked in the disto peripheral end of the ganglion 4 That the rabic tubercle of Babes is present sufficiently often to furnish valuable assistance in cases where only the central nervous system is obtainable without any of the ganglia, but in cases where the ganglia can be had they offer a simpler and easier method of diagnosis than do the brain or cord themselves

81—See abstract in THE JOURNAL of April 16, p 982

88 **Pregnancy and Tuberculosis**—Bernheim finds that the influence of pregnancy is the more serious as it supervenes at the more advanced stage of the disease In case of cured or improved tuberculosis the influence of pregnancy is the more serious as the tuberculosis is the less distant and the cure more recent As regards advice as to marriage for tuberculosis patients, it is exceedingly difficult to establish a rule, as the disease is very capricious in its course and one is in doubt

even after the absence of all bacilli whether the cure is so thoroughly established as not to be annulled by some disease like la grippe or conditions of physical fatigue like pregnancy It is proper to advise that pregnancy may awaken the old tuberculosis and that it may possibly reopen the whole past illness In fact he would systematically prohibit maternity in all tuberculous patients, even those recovered

90 **Nausea and Vomiting During Pregnancy** —The chief causes of this complication, according to Taylor are 1 Deficient excretion due to carelessness in regard to the condition of the bowels and kidneys 2 Mechanical reasons, the pressure on the rectum by malpositions of the uterus or tumors, with or without adhesions, causing reflex disturbance 3 Nervous irritability In all cases careful physical examination should be made to determine the pathologic facts and the cause, whatever it may be removed In cases of nervous irritability the exciting cause should also be looked after and possibly malaria or other toxins Rest in bed, avoidance of excitement, the use of potassium bromid, valerian fluid extract, dilute hydrocyanic acid or other nerve sedatives are mentioned The pernicious vomiting of pregnancy described by some text books is simply the intensification of ordinary conditions usually due to prolonged neglect or ignorance There is danger in the suggested remedies of dilatation of the cervix or emptying the uterus, since there are many women whose statements are unreliable in this regard and whose neglect of treatment is the direct outcome of their desire to have a miscarriage at any price

97 **Our Daily Bread** —Homan reviews the methods of bread making and claims that there is no special difference as regards wholesomeness between alum and cream of tartar baking powders, and says that the prejudice against alum dates from the time when it was used to whiten flour Much of the nutritive value of the flour is dissipated in the common every day methods of baking bread, and the method of bread making has not yet reached perfection Serious dyspeptic difficulties may follow the use of yeast made bread as well as baking powder bread

98 **Myxoma of Larynx** —After noticing the previous literature, Gibb reports his case and calls attention to the lack of characteristic symptoms and the need of careful examination In this case the growth was only visible by the laryngoscope during forced attempts at phonation He thinks it safer in laryngeal cases to withhold a positive diagnosis until a number of examinations have been made and on different days, and after exhausting all the resources at our command to obtain a quiet larynx

101 **Laryngeal Tuberculosis** —Coulter finds guaiacol one of the most reliable therapeutic agents using a rather stronger solution than that recommended by Donnellan rarely having trouble with a beginning of 20 per cent solution and gradually increasing its strength so that at the end of ten days or two weeks we can use an 80 per cent or full strength solution Previous to the use of guaiacol he cleanses the mucous surface with a warm alkaline sterilizing spray, not too vigorously applied and then applies the anesthetic of holocain and antipyrin 1 per cent of the former and 1 5 per cent of the latter before using the guaiacol He has found no remedy so frequently or generally satisfactory in its results Where he can use the injection method this is specially valuable, as the speedy relief it gives to the dysphagia is most gratifying to the patient

103 **Camphoroxol and Menthoxol in Ear Diseases** — From a suggestion of Prof Stetter, of Koenigsberg Hotz was lead to use these oxols in ear troubles, swabbing the attic region in one case with the undiluted drug While his experience is limited, he thinks he owes considerable to these remedies Being non irritating they can be used at the early stage of infectious otitis and may perhaps arrest the disease so as to prevent serious complications While their main field for use fulness is in the tympanic cavity they may also be quite serviceable in the after treatment of mastoid operations and in certain affections of the external meatus

108 —This article was abstracted in THE JOURNAL xxxv, p 1424

109 **Uretero Vesical Implantation** —Baldwin reports three cases in which he implanted the ureters into the bladder from which they had been severed after excision of malignant growths, by passing a forceps into the bladder through the urethra and selecting a point on the bladder wall which could be most easily approximated to the proximal end of the ureter This point was opened, the forceps pushed through, and the end of the ureter caught and drawn into the bladder, to the opening in which it was then carefully united with fine catgut When tension was too great to render implantation safe, the bladder wall was fastened with adhesion to other tissues to relieve the tension He thinks that by artificial dislocation of the bladder in this way the range of attachment can be so increased as to take in all or nearly all cases in which injury to the ureters occurs during hysterectomy It is a much simpler operation than uretero ureteral anastomosis In all three of these cases the result was good, without any leakage

110 **The Streptococcus in Gynecology** —After reporting cases, Hunner concludes that "1 The gynecologist should make a probable diagnosis of streptococcus infection from the history alone 2 The characteristic post puerperal streptococcus lesion is the dense cellulitic mass usually situated in the subperitoneal tissues and localized on one side or in one region Palpation as an aid in diagnosis, is second in importance only to the history Case 2 demonstrated that there are exceptions to this rule 3 Having made a diagnosis of probable streptococcus infection, consider well the method of operating As you have seen from this brief series, many cases can be reached without entering the peritoneal cavity Where it is absolutely necessary to do celiotomy, use great care in guarding the general cavity, and if contamination of the pelvis occurs, leave a free supply of gauze, not so much for drainage as for the purpose of keeping the intestines away from the infected area until there is formation of protective granulations"

113 **Pneumonia of Influenza** —Moorehouse points out the following as the more important differentiations between influenza and other forms of pneumonia The lobar pneumonia of influenza is most certainly atypical The onset lacks the distinct rigor, the severe chest pain and dyspnea are not usual, and the general symptoms of influenza are present The consolidation is less complete, the crepitant râles are less numerous and bronchitis is apt to be a complication The pulse tends to be rapid, weak and irregular The temperature is usually lower and shows remissions when they would not occur ordinarily in croupous pneumonia and the termination of fever is usually by lysis, though this is not invariable In some cases the febrile movement may terminate quite rapidly after a shorter course than is common in true pneumonia, the consolidation persisting for some time after normal temperature The sputum is rarely rusty though it may be either blood streaked or bright red from the copious capillary hemorrhages It is apt to resemble bronchitis sputum and especially likely to be purulent The lobular pneumonia of this type is often more insidious than usual Sometimes localized consolidation may be found in one place one day and in another the next This, however, is more characteristic of congestion than consolidation Not infrequently the consolidation becomes widely spread and closely resembles lobar pneumonia, and certain complications may occur The serous cavities are specially subject to inflammation, there may be dry or serous pleurisy or purulent effusion and empyema or pericarditis In the lungs the tuberculous process seems often to start from this or gangrene or abscess may occur Some of these complications are doubtless due to mixed infection The diagnosis would rest ultimately on the demonstration of the Pfeiffer bacillus, but not all the pneumonias occurring during the progress of influenza can be charged to this

118 **Renal Calculus** —The principal points in the treatment of renal calculus mentioned by Kerr are the relief of pain for which he advises heat and the free imbibition of hot drinks before the use of narcotics Of these last the best is morphin injected into the back over the offending organ The dose should be reasonably large He has never had any occasion to use chloroform between the attacks The alkaline constitu

tional treatment is the only one which has yielded satisfactory results, but its scope is very limited His experience has led him to prefer citrate of potassium or lithia or a combination of these The benefit derived from the use of mineral waters is largely due to the imbibition between meals of large quantities of water, and patients should therefore be advised to drink freely, especially before retiring for the night, as then the urine is more liable to become concentrated and precipitation take place If the calculus be of the uric acid variety the diet should be regulated according to the condition If of the oxalate variety suitable measures are also indicated

119 **Surgical Treatment of Renal Calculus**—The indications for the surgical treatment of renal calculus as stated by Rixford are 1 Cases with history of sudden pain in the region of the kidney or with hematuria, with or without vesical irritability, and those which develop uremic symptoms should be operated upon at once 2 Cases of calculus shown by the x ray to be incurable by medical means, should also be operated upon at once 3 Cases in which small stone located by the x ray remains unmoved for a long period require operation 4 Cases where symptoms of stone persist and show no improvement are properly surgical cases The danger of the morphin habit and of irreparable damage to the kidney should be considered 5 Cases where the calculus has led to pyonephrosis, pyonephritis etc should be operated upon and cases of pyelitis if the diagnosis shows no evidence of subsidence, should not be trifled with but operation should be done in time

130 **Lichen Planus**—Lusk uses bichlorid of mercury in doses of 1/16 to 1/12 t d or biniodid in dose of 1/6 gr following up the treatment after the disappearance of the lesion with smaller doses Mercury in doses of 1/12 gr of bichlorid, 1/2 gr of protoiodid, and 1/6 gr of biniodid, is not merely a tonic, but a decided alterative, and few can stand such doses except syphilitics Lichen planus, he holds is a syphilide, acquired or hereditary and the excellent results from this use of mercury is corroborative of this opinion

131 **Condylomata Acuminata Linguae**—Heidingsfeld concludes "1 Extra genital condylomata acuminata conform not only in clinical character but also in histologic structure, to condylomata acuminata of genital location 2 The chief pathologic change is an akanthosis 3 Though there is no relative increase of connective tissue there is an absolute one and hypertrophy of the papilla is active not passive, in character 4 The so called epithelial fibrillation is a normal process, consisting of spinous processes accentuated by hypertrophy and over staining"

136—See abstract in THE JOURNAL of April 6 p 981

138—This article has appeared elsewhere See THE JOURNAL of January 26 ¶146 p 290

FOREIGN

British Medical Journal, May 18

Some Remarks upon Analysis of 5000 Cases of Death from Malignant Disease E N NASON—The opportunity of analysing more than 5000 cases of death from various forms of cancer was utilized by Nason while preparing the report of the committee appointed by his branch of the British Medical Association to inquire into the subject In these 5000 cases 1837 were males and 3018 females, and in 145 the sex was not stated This at first sight seems to show a marked tendency of females to the disease in a proportion of about 62 to 38 per cent of males This preponderance, however is shown on examination to be due to the great frequency of uterine and mammary cancer In all the female cases it was found that in 40 per cent it was one of these two organs that was affected, hence this liability is due to the possession of these two organs and not to a greater tendency to malignant disease In fact if cancer in organs peculiar to sex be excluded, the male is found to be most subject to this affection, in a proportion of about 53 to 47 per cent Nason accounts for this by assuming that the predisposing causes of cancer are more frequently in operation in the males than in females Among these he mentions trauma and syphilis It is interesting to note that while a steady and remarkable increase in cancer mortality has occurred during the last thirty years, it is far more noticeable in males than in females The last decennial report of the Registrar General shows that the increase in mortality between the years 1861 and 1870 was as great as 78 per cent among males and only 42 per cent among females It is no doubt true that the statistical increase is not altogether genuine, but is partly due to increased skill in diagnosis This would especially apply to malignant disease occurring in the region of the stomach, pylorus and other internal organs where it is liable to occur In the following situations cancer is far more likely to occur in the male than in the female, namely, tongue, bladder, esophagus, jaws, face, neck limbs lips and stomach, and a very large proportion of deaths from cancer in the male are due to cancer of the stomach and pylorus The author gives two interesting diagrams showing the proportionate liability at various ages, from which it appears that while cancer of the uterus and breast reach their maximum frequency about the menopause, or a little later, cancer of the rectum and stomach occur most frequently in the seventh decade, and that there is a more or less abrupt drop after the maximum This fact teaches us that although up to a certain age with probable decreasing cell vitality the liability to cancer increases, after that age the reverse is the case, thus making it appear that the diminution of vitality beyond a certain point fails to give the stimulus required by malignant growths The conclusions of the committee are repeated, and the following may be mentioned as some of the more certain predisposing causes 1 Prolonged local irritation, due to various causes, setting up local inflammatory changes in the irritated tissue 2 The immediate or after effects of direct and sudden injury, whether mechanical, thermal, or chemical 3 Syphilis and possibly other constitutional diseases which are associated with local tissue changes 4 The tissue degenerations of advancing years varying with the age 5 Individual proclivity 6 The presence of fetal remnants or "cell rests" 7 (According to the committee's report) the residence in the neighborhood of a sodden and sewage soaked soil Now all these predisposing causes, except possibly the last, resolve themselves into conditions in which the resisting power of the individual cells have most probably been reduced At any rate the vitality of the cells or their power of specialization has been interfered with This decreased vitality affords just the conditions, Nason believes, in which a parasitic organism may have the most chance of success

The Lancet, May 18

The Pathology and Diseases of the Thyroid Gland WALTER EDMUNDS—In his second lecture Edmunds reviews the symptoms produced by the operation of parathyroidectomy, which in his hands were not so bad as those of total excision in dogs, though other authors, Vassale and Generali, have found them worse The changes which occur in the thyroids after this operation are the diminution or disappearance of the colloid, which is replaced by watery secretion, with changes in the vesicles and secreting cells identical with those described compensatory hypertrophy but the thyroid lobes do not become enlarged but apparently diminish This coincides with the view that the parathyroid glands furnish the secretion and the thyroids store it The symptoms following the operation were the usual ones following athyroidea, namely, tremor, unstable gait passing into paralyses of the hind limbs, emaciation and weakness In two of the dogs marked narrowing of the palpebral fissures was noticed On rabbits, in experiments to test the effect of parathyroidectomy the eyes became wider for a time, but have since become normal The conclusion is that the excision of the thyroid glands and the parathyroids produces enophthalmos and narrowing of the palpebral fissures, while parathyroidectomy does the same These are the results of experiments with the nervous system intact, but experiments of cutting out or excising the laryngeal and vago sympathetic nerves leads to the inference that the secretion of the thyroids is under the central nervous system, and the results of deprivation of the thyroid secretions by the removal of the glands in whole or in part are probably due to defective in

nervation to a certain extent The effect of excess of thyroid as observed after giving large doses of thyroids are noted, and those produced on the eyes, Edwards concludes, are caused by action through the cervical sympathetics, and they correspond to the effect of their stimulation He excised a length of the cervical sympathetic on one side in two monkeys and then fed them on large doses of thyroids In twelve days it was noticed that there was exophthalmos and dilatation of the pupil on the operated side while on the other the reverse condition was noticed

Flies and the Science of Scavenging G V POORE—Considering the multiplication of flies which is such that the female fly might readily have 25 000,000 descendants in a hot summer, and the experience in the South African War with typhoid dissemination Poore calls attention to the necessity of the early removal beyond their reach of all decomposing matter Instead of having deep trenches for the burial of offal and excretions which should be removed at once, he would have shallow ones which can be quickly dug and quickly filled The immediate removal of all organic refuse and its instant covering with earth is in his opinion the solution of the important health questions involved in diseases disseminated through flies and otherwise

Annales de l'Institut Pasteur (Paris), March,

Anticoagulating Serum J BORDET and O GENGOU—The fibrin ferments derived from various animals have a specific, anticoagulating action on the serum of other animals They neutralize the fibrin ferment and precipitate the plasm, modifying the fibrinogen and thus preventing coagulation

To Isolate the Typhoid Bacillus L REMY—Inoculation of a guinea pig is the best means of determining the typhoid nature of a micro organism suggesting the typhoid bacillus The inoculation fails however if the microbes have been agglutinated Remy recommends the direct process for making cultures of the typhoid bacillus and the coli associated one loop of the mixture in 10 c c of sterilized water One loop of this dilution in 10 c c of sterilized water and two loops of the latter dilution in gelatin containing 25 per 1000 of phenic acid and three loops in gelatin containing 5 per 1000 of phenic acid The indirect process consists of three passages through acid bouillon containing 5 per 1000 of H_2SO_4 with 5 per 1000 phenic acid The tubes should be kept at 25 to 30 C

Variability of the Typhoid Bacillus E SACQUÉPÉE—The tendency of the typhoid bacillus to become agglutinated varies under different conditions When long in contact with an immunized or immune subject it loses the power to become agglutinated but spontaneously regains this faculty in a plugged tube The modifications are merely due to its becoming accustomed to its environment and show that the Eberthiform' is also a true typhoid bacillus

Archives Generales de Medecine (Paris), April

The Urinary Secretion in Syphilis J PATOIR—All the old and new diagnostic measures applied to the study of the urinary function in forty six syphilitics showed that in 50 per cent the general nutrition was disturbed during the period of the eruptive manifestations of the disease, and also the functions of the kidneys and liver, except in the very mild cases In the young the disturbances are a hyperactivity of nutritional processes and of the eliminating function of the kidney In the elderly and debilitated, this reaction on the part of the organism does not occur, and existing insufficiency of the kidneys is aggravated Specific treatment restores the general nutrition to normal and there is also a spontaneous tendency in this direction during the intermissions of the disease

Gastric Toxins R CASSAET—The assumption that certain pathologic conditions of varying gravity originate in abnormal changes in certain food materials in the stomach is corroborated by Cassaet's comprehensive researches These abnormal transformations of the food may be due to a superabundant or too powerful gastric juice or to disturbance of the motor functions of the stomach The pathologic conditions are dependent upon these digestive disturbances, cease and recur with them, and are consequently closely connected with them The reproduction in animals of the entire series of pathologic conditions is a convincing argument in favor of the generation of toxins in the stomach The symptoms include vasoconstriction mydriasis, myosis, partial or complete anesthesia, spasms in the extremities, general convulsions, somnolence after eating and coma It may be possible before long to determine the nature of the toxin from the character of the symptoms observed, and by appropriate measures to nullify its action It may even be possible to prevent its entering the circulation by modifying the composition of the blood or the osmotivity of the stomach contents The future may even suggest a means of neutralizing the toxin after it has passed into the circulation, by administering some definite chemical antidote or antitoxin

Bulletin d'Electrotherapie (Paris), April

Chemical Electrolysis in Hypertrichosis E A WEIL—Instead of the tedious intrafollicular electrolysis, Weil applies the electricity all over the surface, first pulling out the hairs and moistening the surface with a solution of nitrate of silver or of chromic acid Under the influence of the electricity, the cathions the silver and chromin, pass into the follicles and, combining with the chlorin of the tissues, evidently form an insoluble silver chlorid which prevents further growth of the hairs Experiments on himself showed that the destruction of the hairs on the spots treated was complete

Nord Medical (Lille), May 15

Electric Treatment of Mucomembranous Enterocolitis E DOUMER—The writer of this communication has been very successful with the application of the continuous current in the treatment of mucomembranous enterocolitis The obstinate constipation was conquered at first, and this was followed by the gradual healing of the anatomic lesions and subsidence of all symptoms The current was applied commencing with 30 to 40 ma and increasing to 50, during eight or ten minutes, reversing the current each minute Even when the current was increased to 150 ma the patient bore it without the slightest injury or production of an eschar Until the stools become normal which occurs in ten or twelve days, he repeats the treatment every day, but after this at longer intervals, and discontinues it the twentieth to the twenty fifth day The electrodes are covered with several thicknesses of chamois skin, moistened with water or gelatin, and placed at the lowest point of the iliac fossæ The results in all his seven cases were completely successful

Presse Medicale (Paris), May 11

Extradural Spinal Cocainization SICARD—The new method of spinal cocainization proposed by Sicard has proved its usefulness for medical analgesia, but is inefficient as a measure for surgical anesthesia It is completely harmless and enables the cocain to be introduced without fail into the extra dural or epidural space He calls it "the method of extra dural injections by the sacrococcygeal route"

Revue de Chirurgie (Paris), May

Remote Results of Forced Instrumental Massage in Treatment of Club Foot E VINCENT—During the last twenty years Vincent has operated on about 500 club footed patients by tarsotomy or osteoclasis The osteoclast he uses for the purpose, illustrated in the cut, is a modification of the Robin osteoclast All his patients walk well, but none have come to the dissecting table, even from an intercurrent disease, consequently he is not able to offer proof of the anatomic conditions Radiographs are useless, as the ossification is too incomplete in the young for the parts to cast a shadow He has never known of any inflammatory lesions after the tarsotomy It produces a traumatism resembling a sprain The parts are held immovable by the osteoclast, and the operator manipulates them with his hand or the lever, or both The portions of the bones in which the ligaments are inserted are sometimes torn out when the ligaments refuse to stretch or break but this traumatism soon heals and aids

in holding the parts in normal position An actual fracture occurred in only one case Investigation of cases operated on ten to twenty years ago shows that the tarsotomy was never followed by osteitis or arthritis of the foot in a single instance, while the benefits of the operation have persisted unaltered for eight to twelve years and more Except in very mild cases, it is better to wait until the child is 1½ to 2 years old before operating Post operative massage is indispensable and the wearing of a well fitting apparatus for years

Perihepatic and Pleural Complications of Appendicitis L LAPEYRE—There are two varieties of pleurisy due to appendicitis, the pyohemic, from embolic infarcts, which may be either on the right or left side, and the pleurisy from propagation, which is always on the right side The latter is usually purulent, but serous pleurisy has been observed as also chronic pleurisy of the base without effusion Both forms of pleurisy are consecutive to a subphrenic abscess, and the pleurisy is merely the final termination of a suphrahepatic or subhepatic abscess passing through the diaphragm or transmitted by the lymphatics The route of propagation is always by way of the peritoneum and the right parieto colic sinus The first retrocecal abscess may be at a distance from the appendix but from this primary focus there is always an uninterrupted continuity of the lesions to the diaphragm The dry, incessant cough and stitch in the side indicate that the inflammation has reached the diaphragm, and may appear even when the pleura is still intact The termination is generally fatal death occurring between the fifteenth and the thirtieth day The only effective treatment is anticipatory removing the appendix at once before these complications have time to develop Cases are on record in which appendicectomy 48 hours after the first indication of appendicitis failed to arrest the ascending inflammation

Semaine Medicale (Paris), May 15

Fifteen Grams of Fowler's Solution Ingested Without Intoxication R LÉPINE—A man 40 years of age had suffered for several months from gastric disturbances of an alcoholic origin, when he took by mistake 15 gm of Fowler's solution in a glass of sweetened water, just as he was retiring and went to sleep at once He was awakened two and a half hours later by intense pain in the stomach and thirst He vomited constantly for several hours, but when seen by the physician, twelve hours later there were no serious symptoms and the recovery was rapid without active medication He had ingested 15 cg of arsenious acid in the solution Lépine ascribes the absence of intoxication to the constriction of the pylorus from the preceding gastric disturbances and the irritation of the poison The stomach walls evidently did not absorb the arsenic The contraction of the pylorus in this case—which has also been noted by Lépine in experiments with animals—shows that the pylorus in intoxications may play the part of a protective sphincter When summoned to attend a person who has taken poison, if it is impossible to induce vomiting or practice lavage of the stomach, contraction of the pylorus should be promoted A subcutaneous injection of 5 mg of apomorphin, for instance, would not induce collapse, and if it did not produce vomiting, would at least cause the pylorus to contract When this protecting mechanism is working, then the lavage can be done with less urgent haste

Centralblatt f d Grenzgebiete d Med und Chir (Jena), iv, 1 to 9

Treatment of Diabetic Gangrene H WOLF—In this review of 172 communications on diabetic gangrene, Wolf states that writers agree in waiting for demarcation, on antidiabetic diet, in cases of non inflammatory gangrene, but with the inflammatory form, expectant treatment is only allowable under close supervision, and is dangerous even in these conditions Investigation of the arteries, especially of the four arteries of the foot, is of great importance in all cases of gangrene in diabetics Whenever the pulse is weak or imperceptible in the four arteries of the foot, operations below the malleolus are usually inadequate If the pulse in the popliteal artery is likewise imperceptible the operation should be at the point where the pulse is felt again If during the operation the severed vessels do not bleed enough, the limb should be amputated at a higher point during the same narcosis Operations on the thigh have no special advantage over those of the leg or knee Local anesthesia—but not infiltration anesthesia—is preferable to general narcosis The latter, with the operation, favor the onset of coma A comatose condition, however, is no indication against operating Five to ten grams of natrium carbonate beforehand is recommended as a preventive measure Irritating antiseptics and tightly drawn sutures should be avoided Lindner lost none of six patients on whom he operated, and Bunge none in four, but the general statistics collected show that 50 out of 110 patients died and 28 out of 75 that were operated on, a proportion of 37 3 per cent The possibility of the development of gangrene should always be borne in mind in examining elderly diabetics In Wolf's 118 collected cases none of the patients were under 40, and almost all were approaching the 60th year Violent pains in the lower limbs should not be diagnosed gout or rheumatism, as they may be due to the affection of the vessels of the nerves which frequent precedes the development of gangrene There is often a history of pains, paresthesia, and especially formication in these cases, and careful attention should be devoted to these symptoms Diabetics should observe great care in cutting the nails or corns, and extreme cleanliness and comfortable foot gear are indispensable Even a slight injury requires immediate surgical treatment Erb and Bunge recommend in case of symptoms of alterations in the arteries, hot foot baths with galvanization of the feet and potassium iodid Massage of the lower limbs is also extremely beneficial, both in preventing or treating arteriosclerosis in these cases or even incipient gangrene The question of prophylaxis deserves more attention than hitherto accorded All writers agree that operative measures must be preceded by antiseptic bandages and antidiabetic diet Powders are applied by some to transform the gangrene into a dry lesion, and thus hasten demarcation The most important factor in treatment is the close supervision of the patient Bunge warns against allowing the most favorable moment for surgical intervention to slip past The inflammation is liable to spread suddenly Tuffier will not operate unless he is able to reduce the amount of sugar in the urine Godlee distinguishes between the deep, vascular, and the superficial, neurogenic gangrene, stating that the former is rapidly progressive and requires prompt amputation, while the latter form is chronic, and expectant treatment is indicated Wolf, however, rejects this classification, as it does not include the gangrene in which bacteria are the chief agents

Pigmentation of the Skin in Case of Affections of the Pancreas W MAGER—Study of the literature on this subject demonstrates that pigmentation of the skin is not the direct result of an affection of the pancreas, but is merely one manifestation of the general hemochromatosis in consequence of the cachexia Some of the affections of the pancreas, such as pigment cirrhosis, are of a secondary nature caused by the hemochromatosis, which is the result of the profound alteration in the blood such as is caused by a malignant neoplasm or diabetes Bronzed diabetes is therefore not a special affection, but is rather merely a severe form of diabetes, accompanied by general hemochromatosis and its consequences

Hysterical Scoliosis G MUSKAT—Three of the fourteen cases of hysteric scoliosis on record are dubious The age varied from 8 to 35 years but the majority of the patients were approaching or just past puberty A fall or violent emotion was the direct cause in a few instances, on a predisposed soil The muscles of the concave side are usually contracted, rigid, tense and painful The spine is not painful nor twisted, and there is no indication of a hump Treatment should be addressed to the hysteria A supporting corset is recommended by several but Dolega relates one case in which it proved injurious The prognosis is not absolutely favorable Some cases recover without treatment others after a few day

of appropriate measures, while some resist all kinds of treatment for months, and one case was dismissed uncured In general the cure is complete in a few weeks, but recurrences may be observed after a longer or shorter intermission

Thyroid Treatment L HASKOVEC—Fifty eight important publications on the treatment of myxedema are reviewed in this communication Haskovec in conclusion quotes Lanz to the effect that most of the symptoms of intoxication observed during thyroid treatment are caused by toxic substances generated by putrefaction of the gland or its extracts These symptoms as a whole are called thyroidism, and Buschan distinguishes between a physiologic and pathologic thyroidism The physiologic symptoms are headache, slight dizziness, pains in limbs, accelerated pulse in persons who eat much meat, increased diuresis and elimination of nitrogen, and loss of flesh Pathologic thyroidism includes nausea, vertigo tremor, high temperature albuminuria glycosuria fainting, collapse, angina pectoris epileptic and uremic attacks, and even possibly sudden death Haskovec does not accept this classification of symptoms, observing that the reaction to the treatment differs in different individuals, and as the essential element of the thyroid gland is still unknown, we are unable to dose or foretell its effect in every case Persons with defective thyroid development are most susceptible Further research and reports of experiences are urgently needed in this line of physiologic and pathologic thyroidism

Movable Liver L TELFKY—Only 70 or 80 cases are on record in which the liver was actually movable, that is, detached from the diaphragm Of these patients, 90 per cent were women The abdomen was pendulous in 16 out of 21 cases, and only 4 were nulliparæ The removal of a tumor favors the detachment of the liver and there are usually predisposing congenital conditions, such as the slackness or absence of the suspensory or coronary ligaments Lesions that render the liver heavier also favor its dislocation, but some unusual exertion or trauma is usually the direct cause Twenty three operations on account of movable liver have been reported It is remarkable that cardiac affections are so rarely complicated with movable liver, as they affect the suspending apparatus injuriously in several ways, by diminishing the aspirating capacity of the thorax by relaxing and enlarging the vena cava, by the development of ascites and by the increased absolute and specific gravity of the congested liver This immunity is possibly due to the fact that persons with severe cardiac affections are usually confined to their bed, and are consequently not exposed to the conditions that produce dislocation of the liver in the predisposed Among the 185 communications quoted, a number of writers consider the corset a protection against dislocation of the liver rather than a factor in its production, but tight skirt bands are considered injurious in this respect Tight lacing may twist the liver on its axis forward or backward and the subjective disturbances may be severe but it can not cause downward dislocation of the liver Einhorn classifies cases of movable liver as, 1, without symptoms, 2, with symptoms of dyspepsia, 3 hepatalgia, 4 colic pains in the liver and 5, symptoms of asthma Other symptoms may indicate occlusion of the biliary passages or interference with the ureter or bladder, but disturbances of the circulation are slight and rare Hematemesis was noted in one case, a liver cough in another, ceasing as the patient reclined, fever in a few others and pains extending to the neck The diagnosis was correct in only four of Boettcher's 23 collected cases operated on The epigastrium was sunken in a few The patient should be examined standing The relaxed ligaments and abdominal wall should be strengthened by tonic measures supplemented by orthopedic appliances in pronounced cases but if these fail the organ must be restored to its proper position and fastened in place Almost all the patients treated by hepatopexy have been relieved of their disturbances and restored to their former working capacity The freshening of the surface of the liver is the most important factor in operating as wounds of the liver display a marked tendency to the formation of solid fibrinous adhesions Protracted after treatment is also important the patient on his back, the pelvis elevated Among the various methods of hepatopexy described, Depage combined laparectomy with the shortening and fastening of the ligamentum teres He excised a large portion of the pendulous abdominal wall and of the linea alba to the margin of the rectus muscles, and sutured the ligamentum teres in the upper corner of the wound This restored the liver to its normal position, in which it was supported by the shortened abdominal wall

Spinal Cocainization F HAHN—In this review of the 1708 published cases of anesthesia by means of spinal cocainization, it is stated that in 110 the analgesia was a failure Severe, threatening symptoms were observed in 25 per cent of all cases and 8 deaths have been reported consecutive to spinal cocainization Forty one authors in the United States have reported 586 operations under this method of analgesia, while only one has been reported in England This was a strumectomy—the only operation above the thorax that has yet been recorded

Centralblatt f Chirurgie (Leipsic), May

Arrested Ether Narcosis KRONACHER—It is unnecessary to use as much ether as generally employed in minor and medium operations Kronacher for three years has been individualizing the amount to each case and found a very small amount sufficient to abolish pain, although deep narcosis was not obtained In extracting twenty teeth from one patient, for instance she screamed as each tooth was drawn, but afterwards stated that she felt no pain This minimum narcosis is not followed by any after effects and the patients retain their consciousness, but later have no remembrance of what occurred during the narcosis His technique is as follows 5 to 10 c c ether are poured on an ordinary mask, allowing considerable access of air then 10 to 20 c c until agitation is noticed then a few more inhalations, when the mask can be removed and the operation commenced Possibly further inhalation of 10 to 20 c c may be found necessary The anesthesia thus obtained lasts ten minutes Even in major operations the ether employed can be restricted to the bare amount sufficient to abolish pain

Apparatus for Infiltration Anesthesia L MOSZKOWICZ—By means of the simple apparatus described, the syringe is dispensed with and the fluid is automatically injected A jar is filled half full of the anesthetic fluid Two tubes with faucets pass through the stopper into the jar, and a rubber tube is attached to each The right hand rubber tube terminates in a needle tip for the injection, and a piston syringe is attached to the left hand tube A few strokes of the piston compress the air in the jar, the faucet is turned to prevent the escape of the air and the syringe is removed Opening the faucet in the right tube sends the fluid in a jet under the influence of the compressed air This tube and tip can be removed and boiled with the other instruments The jar can be kept warm by standing it in a basin of warm sublimate solution and the needle tip can be placed with the instruments on the table Gersuny has been using this apparatus extensively and is much pleased with it

Deutsche Med Wochenschrift (Leipsic), May 9

Successful Serum Diagnosis of Tuberculosis E ROMBERG—Von Behring makes an emulsion of tubercle bacilli which is conveniently handled and has proved successful in the serum diagnosis of tuberculosis Romberg announces that this emulsion is agglutinated by the serum of tuberculous subjects the same as Arloing and Courmont have succeeded in agglutinating homogeneous cultures of living bacilli He also states that blood taken from the placental portion of the umbilical cord of newly born infants, who in all probability were free from tuberculous taint or infection, failed to produce agglutination On the other hand, he found that the serum of 56 4 per cent of persons who showed no clinical evidence of tuberculosis possessed the agglutinating property All the patients with clinically evident tuberculosis, agglutinated except a few in the most advanced stages, and those in whom the lesions had apparently healed These facts indicate that the serum reaction is no assistance for the early diagnosis of an already manifest tubercular infection—it is

positive in persons with no clinical symptoms of tuberculosis and fails in a certain number of clinically certain cases The proportion of the former, however, corroborates Naegeli's assertion in regard to the frequency of tubercular lesions in persons over 18 The positive result of the test is considered by Romberg certain evidence of the existence of a progressive or at least not yet inactive tubercular process He also believes that the negative result testifies either to actual freedom from tuberculosis or to the healing up of an existing tubercular process or to a very advanced stage of the disease He considers this serum diagnosis a most valuable means of detecting still latent tubercular processes His material is too small—only 95 cases—for him to proclaim his convictions with certainty

Work of Cancer Investigating Committee The committee has held four meetings since its organization in February at Berlin In the various addresses and reports we note that von Leyden is in favor of the parasitic theory of malignant neoplasms and thinks that a parasitic origin offers a much better outlook for successful prophylaxis The statistics presented show that "cancer has increased by 50 per cent in Prussia since 1888 There are 10,000 patients with "cancer among the 500 000 inmates of the various hospitals and sanatoriums throughout the country The records of the life and sickness insurance companies are a valuable mine of information for such investigations They seem to reveal a decrease in the number of cancers among the poorer classes and an increase among the well to do Pfeiffer urged that every case of carcinoma reported should be accompanied by the pathologico anatomic proof and this could easily be accomplished if the pathologic institutes would investigate the material sent in by members of the committee and others interested and if some uniform definition of the term carcinoma could be decided upon The experience of the Gotha Life Insurance Bank has been that the residences of the Roman clergy in south Germany are frequently actual "cancer houses" Behla stated that cancer is endemic in Luckau but confined to certain localities and houses Examining these houses, he found that each one was damp and mouldy, especially in the cellars He also noticed that persons most frequently affected were those whose business took them into cellars, dealers in fruits wine merchants, farmers, etc or else brought them in contact with wood such as carpenters cabinet makers, masons woodsmen etc Villages that have many cases of cancer have always a damp subsoil while others on a dry foundation seem to be almost immune to cancer The fungus growth, merulius lacrymans, or "Hauschwamm" is constantly spreading in the houses of central Europe It is estimated that every tenth recently constructed building in Berlin is invaded by the merulius Whether it is pathogenic for man or not is not yet decided but in animals it induces a proliferation of epithelium and connective tissue It develops with yeast like features and its spores may alight on food, vessels, water, etc He urges that the connection between the presence of this mould and the prevalence of cancer be borne in mind in collecting statistics in future A subcommittee was appointed to collect and report all cases of malignant neoplasms published in the medical literature The government has awarded 3000 marks for the expenses of the committee and the congress of internal medicine and a sickness insurance society have each given 500 marks

May 16

Occult Gastric Hemorrhages I BOAS—By the term "occult hemorrhage" Boas means an oozing of blood too insignificant to be detected by the naked eye in the stomach contents and yet by its persistence a serious menace to the health Repeated investigation of the stomach contents of 83 individuals showed that these occult hemorrhages never occurred in the course of gastric neuroses acid or subacid gastritis, hyperacidity, hypersecretion or moderate ectasia Traces of blood were found occasionally in cases of gastric ulcer, and consecutive stenosis of the pylorus, also in a patient with stenosis of the duodenum, in syphilis of the stomach and in a case of probably carcinomatous stenosis of the large intestine On the other hand, the blood was found constantly in a third group of cases which included all of carcinoma of the stomach—a total of twenty Independently of the chemical composition of the stomach contents or of the motor functions of the organ, blood was found invariably in the stomach contents in these case although the closest examination failed to reveal the presence of blood by ordinary tests Blood was also found in the stools at the same time, but was not macroscopically apparent The traces of blood were rendered evident by Weber's guaiacum test described in the *Berlin Klinische Wochenschrift*, 1893, No 19 It is more reliable and sensitive than any other chemical, spectroscopic or microchemical reaction This "occult hemorrhage is not a very important diagnostic point in itself, but combined with others, it affords a valuable corroboration of other diagnostic measures for the determination of carcinoma or ulcer of the stomach differentiating them from a gastric neurosis Traces of blood in the feces are equally significant Boas has noted macroscopically evident hemorrhage in 36 per cent of 100 cases of certain carcinoma of the stomach The discovery of these occult hemorrhages suggests that perhaps they are the most important cause of the marasmus accompanying carcinoma Such patients are bleeding to death by droplets, and it may be possible by appropriate medication to arrest the tendency and thus prevent this waste of the vital fluid

[Simon describes the guaiacum test for blood in urine as a mixture of equal parts of tincture of guaiacum and oil of turpentine, which has been ozonized by exposure to the air It is allowed to flow carefully along the side of a test tube upon the urine to be examined, in such a manner as to form a distinct layer above the urine In the presence of blood pigment a white ring, which gradually turns to blue will be seen to form at the surface of contact—ED]

Therapie der Gegenwart (Berlin), May

Treatment of Hammer Toe F KAREWSKI—This annoying condition can be cured without danger of recurrence, by exposing the contracted flexor tendon through a longitudinal plantar incision, and opening the joint severing the tendon The phalanges are then made to protrude from the wound by hyperextension, and the articulating surfaces are trimmed with bone cutting forceps until they are in easy contact with each other without tension of the soft parts There is no recurrence of the deformity with this technique, which Karewski has been following for ten years

Therapeutische Monatshefte (Berlin), May

Influence of Certain Substances on the Gastric Secretions A HERZEN—The writers experiments demonstrate that ordinary dextrin and Liebig's extract of beef have a powerful action in stimulating the secretion of gastric juice and in the production of pepsin if administered in the amount of 25 to 50 gm at a time The dextrin increases the production of pepsin while the beef extract affects pre eminently the secretion of gastric juice Alcohol has also a powerful effect in promoting the secretion of the gastric glands, but has no peptogenic power Even introduced by the rectum, this elective influence on the gastric glands is strikingly apparent Chemically pure, white dextrin does not affect the gastric secretions, but the allied carbohydrates, inulin and liver glycogen, seem to possess marked peptogenic power, but even with as much as 25 to 50 gm there is no stimulation of the gastric secretion If after their ingestion, however, 5 c c of alcohol are administered by the mouth or rectum, a gastric juice extremely rich in pepsin is secreted in abundance The physician by these means is enabled to control the gastric secretions at will The detailed report of the experiments and tests was published in a recent issue of *Pflueger's Archiv*

Treatment of Puerperal Fever AUFRECHT—The success obtained by Aufrecht in the treatment of croupous pneumonia with the subcutaneous injection of quinin, and the fact observed that pneumonia occurring in the lying in period is frequently accompanied or followed by puerperal fever, suggested that the injections of quinin might prove as effective in the latter affection as in the former Three years of experience have confirmed the truth of these premises and demonstrated the great value of this method of treating puerperal fever, which Aufrecht now urgently recommends to the profession All cases

of puerperal endometritis in his service are treated by intra uterine injection of a 2 5 per cent. solution of carbolic acid, whenever the temperature reaches 39 C repeated two or three times in the twenty four hours The fluid must be warm and the injecting catheter be provided with a deep groove on the out side for the escape of the fluid which is caught and measured as it emerges from the vagina The quinin is injected in the proportion of 5 gm quinin hydrochlorate in 17 gm of warm water in the side of the abdomen into the subcutaneous con nective tissue the needle held perpendicularly as the patient reclines

Necessity of Isotonic Solutions for Local Anesthesia — The disturbances noted after the injection of cocain or eucain, are due to the fact that the fluids are not isotonic with the blood serum They can be entirely obviated if the solution is rendered isotonic by adding salt Braun and Heinze in recent works have recommended the formula Eucain B 1 sodium chlorid S and distilled water 100 at body temperature

Zeitschrift f Orthopaedische Chirurgie (Stuttgart), ix, 1

Treatment of Severe Scoliosis C DEUTSCHLAENDER — Scoliosis is not merely a lateral curvature of the spine but is frequently also a horizontal frontal or sagittal torsion Since this fact has been understood the results of treatment have been better Correction of the deformity can be accomplished in most cases unless there are irreparable lesions The in difference and scepticism of many physicians in regard to the curability of severe scoliosis have driven many patients to charlatans A trained eye and clear understanding of the pathologic conditions are necessary to individualize treatment to the case The prognosis is of course better during the periods of rapid growth but even in adults the results justify treatment although one and a half to two years may be re quired or even more The spinous processes are no indication of the extent of the distortion Specimens are illustrated show ing that the processes may be almost on a straight line while the rest of the spine is extremely distorted The shape and position of the ribs are dependent on the spine and therefore the condition of the latter can best be estimated by the arcs of the ribs and their oblique diameters The contracted and rigid muscles are first restored to normal by gymnastic exer cises and the spine mobilized In the mobilizing exercises ef forts must be directed to transform the irregular slanting ellip soid formed by the deformed arcs of the ribs with its unequal diameters into a regular oval as in normal conditions with both diameters equal The Schulthess pendulum apparatus is the most effective for this functional correction, but good re sults are obtained with less expensive appliances, especially the sloping plane and the Hoffa Barwell sitting frame The plaster cast is applied in the latter an assistant pressing the thorax into the correct shape The cast holds the entire spine in ex tension fitting close under the lower jaw and ears, but allow ing considerable motion of the arms It should not be taken off for eight to twelve weeks and then only with extreme care the patient reclining at first all day not even bathing The fifth day the patient can get up for an hour and after a week he need not stay in bed but gradually return to the mobilizing and strengthening exercises The physician should see the pa tient two or three times a year thereafter and the latter should take a month s course of gymnastics and massage every year if possible

Books Received

Acknowledgment of all books received will be made in this col umn and this will be deemed by us a full equivalent to those send ing them A selection from these volumes will be made for review as dictated by their merits or in the interests of our readers

CLINICAL PATHOLOGY OF THE BLOOD A Treatise on the General Principles and Special Applications of Hematology By James Ewing A M., M D Professor of Pathology in Cornell University Medical College New York City Illustrated with 30 Engravings and 14 Colored Plates drawn by the Author Cloth Pp 432 Price $3 50 Philadelphia and New York Lea Brothers & Co 1901

INDUCTION COILS How to make use and repair them including Ruhmkorff Tesla and Medical Coils Roentgen Radiography Wire less Telegraphy and Practical Information on Primary and Sec ondary Battery By H S Norrie Second Edition Revised and Much Enlarged Cloth Pp 269 Price $1 00 New York Spon and Chamberlain 1901

ORAL SURGERY A Text Book on General Medicine and Surgery as Applied to Dentistry By Stewart Le Roy McCurdy A M M D Professor of Anatomy and Surgery Pittsburg Dental College Cloth Pp 368 Price $3 00 net Pittsburg Pa The Calumet Publishing Co 1891

TRANSACTIONS OF THE AMERICAN PEDIATRIC SOCIETY Twelfth Session Held at Washington D C May 1 2 and 3 1900 Edited by Walter Lester Carr M D Volume XII Cloth Pp 249 Re printed from *Archives of Pediatrics* 1900

PROCEEDINGS OF THE CONNECTICUT MEDICAL SOCIETY 1900 One Hundred and Eighth Annual Convention held at New Haven May 23 and 24 Cloth Pp 394 Published by the Society 1900

NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS Transactions of the Tenth Annual Meeting held at Atlantic City N J June 4 1900 Paper Pp 71 Easton Pa Chemical Publishing Co 1901

HEALTH AND HYGIENE FOR THE HOUSEHOLD By John Joseph Nutt B S M D Member of the American Medical Association Cloth Pp 69 Price 50 50 New York The Abbey Press

MUNICIPAL SANITATION IN THE UNITED STATES By Charles V Chapin M D Superintendent of Health of the City of Providence Cloth Pp 970 Price $5 00 Providence R I Snow and Farnham 1901

The Public Service

Army Changes

Movements of Army Medical Officers under orders from the Adjutant General s Office Washington D C May 16 to 22 1901 *inclusive*

Aristides Agramonte contract surgeon is relieved from further duty on the board investigating infectious diseases prevalent in the Island of Cuba and will report to the commanding general of the Department of Cuba for assignment

Dallas Bache colonel and asst surgeon general U S A sick leave of absence extended relieved from further duty in the office of the Surgeon General of the Army

Charles N Barney contract surgeon member of board at Fort Monroe Va to determine the fitness of officers of the Army for promotion

Louis Brechemin major and surgeon U S A relieved from duty on examining board at Denver Colo

George L Bushnell major and surgeon U S A member of an examining board at Denver Colo vice Major Louis Brechemin surgeon U S A relieved

Jere B Clayton lieutenant and asst surgeon U S A member of a board at Fort Myer Va to examine officers of the Army for promotion

Christopher C Collins lieutenant and asst surgeon U S A *member of a board at* San Francisco Cal to examine officers of the Army for promotion

Joseph J Curry captain and asst surgeon Vols from the Army and Navy General Hospital Hot Springs Ark to Manila P I via San Francisco Cal for duty as a member of the board to in vestigate tropical diseases

William B Davis major and surgeon U S A member of a board at Fort Meyer Va *to examine* officers of the Army for promotion

William H Forwood colonel asst surgeon general U S A on being relieved from duty as chief surgeon Department of California to report in person to the Surgeon General for duty in his office

Charles M Gandy captain and asst surgeon U S A former orders amended so as to direct him to proceed from Fort Slocum N Y on the transport *Ingalls* via the Suez canal to Manila P I for duty in the Division of the Philippines

Luther B Grandy major and surgeon Vols leave of absence ex tended

Frederick N C Jerrauld contract surgeon from Buffalo N Y via Seattle Wash to Fort St Michael Alaska for duty in the Department of Alaska

Henry S Kilbourne major and surgeon U S A *member of a board* in San Francisco Cal to examine officers of the Army for promotion

John A Metzger major and surgeon Vols leave of absence extended

R M O Reilly lieut col and deputy surgeon general U S A member of a board at Fort Monroe Va to determine fitness of officers of the Army for promotion

George P Peed *captain* and asst surgeon Vols leave of absence extended

Ira A. Shimer lieutenant and asst surgeon U S A, leave of absence granted

Edward D Sinks captain and asst surgeon Vols recently ap pointed and now at Batavia Ohio to proceed to Manila P I via San Francisco Cal for assignment in the Division of the Philip pines

Richard P Strong lieutenant and asst surgeon U S A from the Division of the Philippines *to duty* at the Army and Navy General Hospital Hot Springs Ark

Eugene L Swift captain and asst surgeon U S A to report in person to the president of the examining board in Washington D C for examination for promotion

Frederick A Washburn Jr major and surgeon Vols recently appointed and now on leave to proceed to Manila P I via San Francisco Cal for duty in the Division of the Philippines

Jean C Whitney contract dental surgeon from Washington D C to Manila, P I via San Francisco Cal for duty in the Divi sion of the Philippines

Allie W Williams lieutenant and asst surgeon U S A from Fort Columbus N Y to duty at Fort Logan Colo

Francis A Winter captain and asst surgeon U S A from San Francisco Cal to Fort Sheridan Ill for post duty

Appointments, promotions and other changes in the regular and volunteer medical forces of the Army, reported from the Adjutant General's Office, April 15 to May 15, 1901

During the month ending May 15 1901, the following promotions and other changes in the status of medical officers of the regular and volunteer forces were reported from the office of the Adjutant General of the Army Previous changes of this character were published in THE JOURNAL of May 11, 1901

Appointments, Regular Army—None

Promotions, Regular Army—Lieutenant Colonels Henry Lippincott and Calvin DeWitt, deputy surgeons general, to be colonels and assistant surgeons general, the former to date from April 13, the latter from May 7, 1901 Majors Charles K Winne and Timothy E Wilcox, surgeons, to be lieutenant colonels and deputy surgeons general, the former to date from April 13, the latter from May 7, 1901, Captain Charles E Woodruff, asst surgeon, to be surgeon, with the rank of major, to date from April 13, 1901

Retirements, Regular Army—Colonel Charles C Byrne, assistant surgeon general, May 7, 1901, he having attained the age of 64 years

Appointments, Volunteers—To be surgeons with the rank of major Ernest K Johnstone, of California April 11, 1901, Captain Charles Lynch, asst surgeon, U S A April 22, 1901, Samuel C de Krafft, of Maryland, April 26, 1901 Captain Isaac W Brewer, asst surgeon, U S Vols, May 7 1901, Captain George P Peed, asst surgeon U S Vols, May 7 1901 William L Whittington, of Missouri, May 7 1901 William D Bell, of New York May 7, 1901, and Lawrence C Carr of Ohio, May 7, 1901 To be assistant surgeons with the rank of captain Edward D Sinks of Ohio, and Abraham D Williams, of Florida, May 7, 1901 Luther P Howell of Ohio, and Leonard K Graves, of New York April 15, 1901 A A Surgeon Joseph C Garlington, March 13, 1901, Roger P Ames of Louisiana April 18, 1901 Howard A Grube, of Michigan, April 16 1901 Samuel T Weirick, of Missouri, April 20, 1901, Michael E Hughes, of Massachusetts, April 27, 1901 Percy L Jones, of Tennessee, April 22 1901, Fred W Palmer of Michigan, and H Brookman Willinson of Alabama, May 4, 1901 Hospital Steward, to be assistant surgeon with the rank of first lieutenant, 34th Regiment of Infantry Eliphlet C Baldwin, April 13, 1901

Promotions, Volunteers—Captain Abram L Haines asst surgeon 31sts Infantry, to be surgeon with the rank of major, April 5, 1901, Captain Harold L Coffin asst surgeon 39th Infantry to be surgeon with the rank of major March 22, 1901, Captain William D Bell, asst surgeon 42d Infantry, to be surgeon with the rank of major, February 2, 1901 Captain Charles L Furbush, asst surgeon, 44th Infantry, to be surgeon with the rank of major, April 2, 1901, First Lieutenant Richard S Griswold, asst surgeon, 26th Infantry, to be asst surgeon with the rank of captain, April 24, 1901, First Lieutenant Joseph L Sanford asst surgeon, 29th Infantry, to be asst surgeon, with the rank of captain, March 21 1901 First Lieutenant Charles M Galbraith asst surgeon, 47th Infantry, to be asst surgeon with the rank of captain, March 23, 1901, and First Lieutenant William W Purnell, asst surgeon, 48th Infantry, to be asst surgeon, with the rank of captain, April 23, 1901

Hororably Discharged, Volunteers—Major George H Penrose, surgeon, April 19 1901

Commissions Vacated by New Appointments Volunteers—By promotion to major and surgeon, U S A, Major Walter D McCaw, surgeon, 42d Infantry February 2 1901 By appointment as major and surgeon, U S Volunteers Major Franklin A Meacham, surgeon, March 22, 1901 Major William F Lippitt Jr, surgeon 44th Infantry, April 2, 1901, Major Charles M Drake, surgeon, March 23, 1901 Major Henry F Hoyt, surgeon, March 24 1901 Major Samuel T Armstrong surgeon, March 22 1901 Major William F de Needeman, surgeon, March 22 1901 Major Ira C Brown, surgeon, March 27 1901 Major Frederick J Combe, surgeon April 17, 1901 and Captain Frederick A Washburn, Jr, asst surgeon, 26th Infantry, April 24, 1901 By promotion to captain and asst-surgeon, U S Volunteers Captain Howard A Grube, asst surgeon, 48th Infantry, April 23 1901 First Lieutenant Thomas T Jackson asst surgeon, 44th Infantry, April 13 1901 and First Lieutenant Laurel B Sandall, asst surgeon, 43d Infantry March 25, 1901

Mustered Out of Service, Volunteers—Captain Albert H Eber, asst surgeon, 30th Infantry, April 3, 1901, and Major James E Shellenberger, surgeon Captain H Brookman Wilkinson, asst-surgeon, and First Lieutenant Eliphlet C Baldwin, asst surgeon all of the 34th Infantry, April 17, 1901

Appointments Declined, Volunteers—By Major Herbert W Cardwell, surgeon U S Volunteers, the appointment of major, surgeon, March 22 1901 Major Charles F Mason, surgeon, 26th Infantry, the appointment of major, surgeon, April 24, 1901 Capt Charles L Furbush asst surgeon, 44th Infantry, the appointment to major, surgeon, March 31, 1901 First Lieutenant Loren B T Johnson assistant surgeon, 36th Infantry, the appointment of captain, asst surgeon, April 10 1901, A A Surgeon Thomas C Stunkard, U S A the appointment of captain, asst surgeon, April 11 1901 A A Surgeon Harry S Moore U S A, the appointment of captain, asst surgeon, March 20 1901 A A Surgeon Verdo B Gregory, U S A the appointment of captain asst surgeon April 15 1901 A A Surgeon Thomas W Bath U S A, the appointment of captain, asst surgeon March 28, 1901, A A Surgeon Joseph C Garlington, the appointment of captain, asst surgeon, March 21 1901 A A Surgeon James B Pascoe, U S A the appointment of captain, asst surgeon, March 25, 1901 Nelson Miles Black, of Wisconsin, the appointment of captain asst surgeon, April 29, 1901

Navy Changes

Changes in the Medical Corps of the Navy for week ended May 25

P A Surgeon R M Kennedy, ordered home from the *Bennington*, via public conveyance

Asst-Surgeon M V Stone, detached from the *Buffalo*, and ordered home to wait orders

Asst Surgeon C H DeLancy detached from the *Bancroft*, when put out of commission, and ordered to the *Buffalo*

Asst Surgeon F M Furlong, ordered home via public conveyance

Asst Surgeon D B Kerr, ordered home, via public conveyance

Asst Surgeon E J Grow, ordered home via public conveyance

Asst Surgeon D G Beebe, ordered home via public conveyance

Asst Surgeon C D Langhorne, ordered home, via public conveyance

Asst Surgeon J Stepp detached from the *Castine* and ordered to the *Isla de Luzon*

Asst Surgeon E J Grow, detached from the *Isla de Luzon* and ordered to the *Castine*

Asst Surgeon E Thompson, detached from the *Solace* and ordered to the *Petrel*

Asst Surgeon R W Plummer, detached from the *Petrel* and ordered to the *Nashville*

Asst Surgeon F M Furlong, order detaching from *Brutus* and ordered to Guam, L I

Marine Hospital Changes

Official list of the changes of station and duties of commissioned and non commissioned officers of the U S Marine Hospital Service for the seven days ended May 23, 1901

Surgeon C T Peckham, granted leave of absence for thirty days from April 19, on account of sickness Granted thirty days extension of leave of absence, on account of sickness from May 20

Surgeon A H Glennan, to rejoin station at Habana

P A Surgeon C P Wertenbaker, to proceed to Meridian, Miss, for special temporary duty

P A Surgeon J B Greene, granted five days extension of leave of absence

Asst Surgeon C E Decker, granted leave of absence for ten days from May 11, on account of sickness

Asst Surgeon Taliaferro Clark, granted leave of absence for thirty days from May 22

Asst Surgeon G M Corput, to proceed to South Atlantic quarantine Granted leave of absence for one month

A A Surgeon J C Rodman, granted leave of absence for four days

A A Surgeon A W Slaughter, granted leave of absence for four days from June 4

BOARD CONVENED

Board convened to meet at Washington, D C, May 20 1901, for the purpose of making physical examination of applicants for cadetship in the Revenue Cutter Service Detail for the board Surgeon L L Williams, chairman, Asst Surgeon B S Warren, recorder

Health Reports

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General, U S Marine-Hospital Service, during the week ended May 24, 1901

SMALLPOX—UNITED STATES AND INSULAR

Alaska May 11, Hoonah, 15 deaths Killisnoo, 4 cases.

California Los Angeles, April 27 May 11, 12 cases, San Francisco, May 4 11, 6 cases

Illinois Chicago, May 11 18, 6 cases

Indian Territory Coalgate, May 11, 65 cases

Kansas Wichita, May 4 18 37 cases

Kentucky Lexington, May 11 18, 4 cases

Louisiana Baton Rouge May 5 12, 2 cases 1 death, New Orleans, May 11 18, 9 cases, 2 deaths

Massachusetts Boston, May 11 18, 10 cases, New Bedford, May 16 18, 5 cases

Michigan Detroit, May 11 18, 58 cases

Minnesota Minneapolis May 4 11, 23 cases

Nebraska Nebraska City, March 30 April 6, 2 cases, April 20 27 3 cases South Omaha, April 23 May 21 36 cases

New Hampshire Manchester, May 11 18, 4 cases

New Jersey Jersey City, May 5 19, 15 cases, Newark, May 11 18 4 cases, 1 death

New York New York, May 11-18 105 cases, 13 deaths

Ohio Cincinnati, May 10 17 9 cases, 1 death, Cleveland, May 11 18, 54 cases Youngstown, May 4 18, 2 cases

Pennsylvania May 11 18, Lebanon, 4 cases Philadelphia 3 cases 1 death Pittsburg, 2 cases, Steelton, 2 cases Williamsport 1 case

Tennessee May 11 18, Memphis 12 cases, Nashville, 3 cases

Utah Salt Lake City, May 4 11, 7 cases

Washington Tacoma, May 1, 1 case from Vashon Island

West Virginia Wheeling, May 11 18, 8 cases

Wisconsin Fond du Lac, May 11 18, 1 case

Hawaii Kauai Lihue, April 23, 1 case Waimea, May 6 1 case

Porto Rico Ponce, May 6 13, 3 cases San Juan, May 4, 2 cases

SMALLPOX—FOREIGN

Austria Prague, April 20 27 4 cases

Belgium Antwerp April 20 27, 5 cases

France Rheims, April 8 15, 2 cases

India Bombay, April 16 23, 6 deaths Calcutta April 13 20 93 deaths Karachi, April 14 21, 4 cases, 3 deaths, Madras, April 13 19 11 deaths

Malta April 14 20 1 case

Russia Moscow, April 14 21, 6 cases 2 deaths

Odessa, April 20 27, 5 cases 3 deaths, Warsaw, April 13 20, 4 deaths

Spain Malaga, April 16 20, 1 death

YELLOW FEVER

Cuba Havana, May 6 11, 2 cases

CHOLERA

India Bombay April 16 23 4 deaths Calcutta, April 13 20, 96 deaths Madras, April 13 19, 1 death

PLAGUE

Africa Cape Town, to April 14 291 cases 118 deaths

China Hongkong March 23 April 6 31 cases 28 deaths

India Bombay, April 16 23 450 deaths Calcutta April 13 20 389 deaths Karachi, April 14 21, 270 cases 238 deaths

Japan Nagasaki, April 17 1 death

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Address.

THE NATURAL METHOD OF TEACHING THE SUBJECT OF MEDICINE *

WILLIAM OSLER, M D

PROFESSOR OF MEDICINE JOHNS HOPKINS UNIVERSITY
BALTIMORE, MD

There are three great groups of studies in the medical school The first includes the mechanism of the normal body, the second, a knowledge of the abnormal, the third, a knowledge whereby deviations from the normal may be prevented and rectified

To become acquainted with the structure and functions of the normal body, the student spends two or more years in the laboratories, and this part of his work has, within the past quarter of a century not only increased enormously but a complete revolution has been effected in the methods of instruction Much more difficult is it to give to the student a thorough training in the other great groups of studies and I think among teachers there is a feeling that the work along these lines has not progressed quite so satisfactorily as it has in the subjects embraced in the first group I wish to tell a plain tale of the method of teaching medicine at the Johns Hopkins University There is nothing very novel about it, except that in the third and fourth years the hospital is made the equivalent of the laboratories of the first and second, and in it the student learns the practical art of medicine This may be called the natural mode of teaching the subject

Ask a practitioner of twenty years standing how he has become proficient in his art, he will reply, by constant contact with disease and he will add that the medicine he learned in the school was totally different from the medicine he learned at the bedside The graduate of a quarter of a century ago went out with little practical knowledge, which increased only as his practice increased In the natural method of teaching the student begins with the patient continues with the patient, and ends his studies with the patient, using books and lectures as tools as means to an end The student starts in fact, as a practitioner as an observer and repairer of disordered machines with the structure and orderly functions of which he is perfectly familiar A mechanism of astounding perplexity the human body is subject to so many accidents and derangements that no worker however skilful, can deal with all, and the apprentices can only know well a few of them but he can learn principles of action and can be taught how to repair the more important of the disorders to which the machine is liable

Novel conditions confronted us in planning the work of the Johns Hopkins Medical School The physiological and pathological laboratories had been organized for many years and the hospital had been open for four years before the school proper was established The students were carefully selected, having had a previous training in the sciences Most helpful of all there were no traditions to consider in arranging the curriculum, which as laid down by the University, embraces a three years' preliminary course (in which the sciences and modern languages are the main subjects), followed by a four years' medical course, the first two of which are devoted to anatomy, physiology, pharmacology, physiological chemistry and pathology, and the third and fourth to the subjects of medicine, surgery obstetrics and the specialties

A word first as to the general arrangement of the department of medicine The personnel consists of a professor, who is ex-officio in charge of the medical department of the hospital, an associate professor, and a corps of instructors and assistants The number of beds in the medical wards ranges from 100 to 125, and there is a large out-patient department There are eight resident physicians on the medical staff, four appointed annually from the graduating class as internes, and four seniors, more or less permanent the first assistant (the associate in medicine), upon whom devolves the main responsibility of the service in the absence of the professor, the second assistant who has charge of the private patients and helps in the ward teaching, the third assistant, who has charge of the clinical laboratory and takes the class in clinical microscopy, while the fourth assistant is bacteriologist to the service and has charge of the isolation ward These senior assistants are encouraged to remain as long as possible, and they are most essential factors in the scientific work and in the teaching The out-patient medical department is in charge of the associate professor, with a corps of instructors and assistants

The work of teaching is conducted in the following manner

I PRELIMINARY INSTRUCTION IN NORMAL DIAGNOSIS

As a teacher can take nothing for granted in a medical student, there is given in the last term of the second year a brief preliminary course, dealing with the application of anatomy and physiology to practical medicine, more particularly with reference to the heart and lungs The student is instructed how to study the sounds of the heart in health, and the characters of the respiratory murmur, and the anatomical relations of the organs to the surface markings are carefully considered While instruction of this sort really belongs to anatomy and physiology there are advantages in having it taught with clinical application so that the associate professor of medicine, Dr Thayer holds these demonstrations and practical exercises

II THE WORK OF THE THIRD YEAR

We take as our motto the old maxim "The whole art

* The Annual Address delivered before the Society of Internal Medicine Chicago May 15 1901

of medicine is in observation" The work consists in, first, the training of the senses in the observation of disease, secondly, courses in physical diagnosis and clinical microscopy, and, thirdly, practical work in history taking, fourthly, the general medical clinic in the amphitheater

(a) The Observation Class—The student must first be taught to observe and can not do better than begin his acquaintance with disease among out-patients A man with typhoid fever in bed scoured and cleaned, looks very different from the poor fellow who totters into the dispensary Connected with the examining rooms of the out-patient department is a large room, in which a class of seventy-five can be easily accommodated Here at 12 o'clock on three days of the week is held what we call an observation class Three or four cases are examined in the hour by students taken in rotation The student asks the questions, repeats the answers and makes the examination He is taught to use his senses in a simple and orderly manner The seeing eye and the feeling finger are products of long training How to see and what to see, how to touch and what to touch constitute the main lesson of the hour Locke well remarks "Nicely to observe the history of diseases in all their changes and circumstances is a work of time,

Figure 1

accurateness, attention and judgment" A diagnosis is not always reached, and the treatment is not necessarily discussed The important point is a study of the objective features of the case Fig 1 illustrates this class in session Fig 2 is from a photograph of the class-book giving the work during part of the month of January To teach the student to follow the natural history of disease is most essential, a case is not shown to-day and dismissed finally, but I insist that the student shall follow it to the finish For this purpose each day I begin with a routine question What have you to report on your cases? Usually four or five minutes are taken in statements relating to patients who have been before the class A good number of the cases, as you see by one of the columns on the chart, go to the wards, where the students have the privilege of visiting and watching the progress In cases which return to their homes, the student is encouraged to make a visit at least once a week, or when, as often happens the patient lives out of town, a correspondence is begun At the end of each month there is a clinical "round-up" The student whose turn comes, analyzes the material of the month, arranging it systematically At the end of the session the eight students who have given the monthly "round-ups" meet and make a general report, which is read on the last day of the class I pass around the book of the last session, which will give you a very good idea of the work, and I give here the following summary

Cases, 230, deaths, 15, mortality, 6 5 per cent

		Cases	Deaths
1	Specific infectious diseases	61	6
2	Diseases of the digestive system	35	7
3	Diseases of the respiratory system	21	0
4	Diseases of the circulatory system	32	1
5	Constitutional diseases	17	0
6	Diseases of blood and ductless glands	20	0
7	Diseases of kidney	5	1
8	Diseases of nervous system	22	0
9	Diseases due to animal and vegetable parasites	4	0
10	Diseases due to Intoxications	6	0
11	Pregnancy	1	0
12	Anatomical and pathological curiosities	6	0

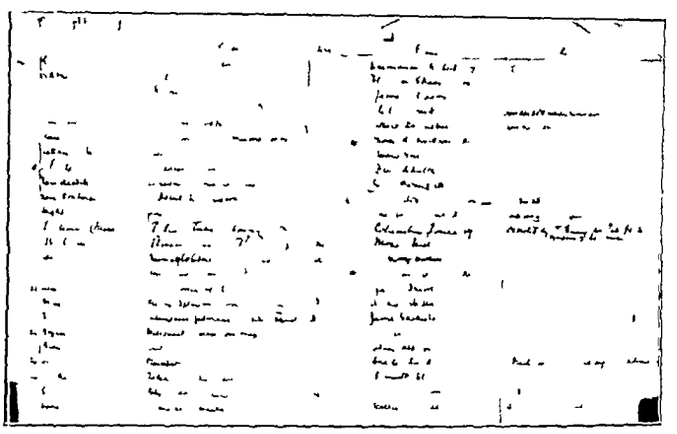

Figure 2

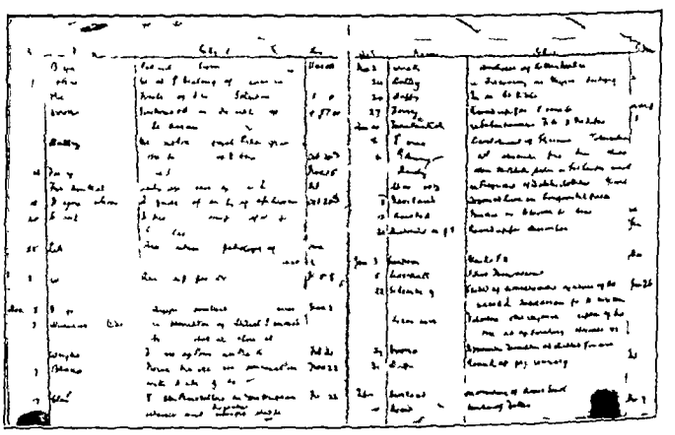

Figure 3

To get the student into the habit of following the cases is most important, and it adds very much to his interest in the work In connection with this observation class we unite a certain amount of elementary training For example, there is a dictionary on the table, and if the meaning of a word is doubtful, if the derivation is needed, or if the pronunciation is wrong the student is asked to look it up for himself He is also made to help considerably in the teaching by reporting upon certain subjects Fig 3 illustrates some of the questions which have been set this session In the report lucidity and brevity are regarded as the essentials In looking up the literature of a subject I refer the student either to the "Index Catalogue" or to "Neale's Digest," or very often I give him specific references to the literature If a book is not in the Library of the Medical School, or in that of the Medical

and Chirurgical Faculty, the librarian sends for it from the Surgeon-General's Library Two purposes are served 1 the student is taught how to study a problem in the literature and he has a chance, if he wishes, to show what he can do with his tongue or pen in presenting the subject, and 2, both students and teachers often get most useful information For example, I had never seen nor read the original description of either Basedow or Graves on exophthalmic goiter until a third-year student presented the question before the class I like to have the original descriptions of diseases presented in this way Sydenham's account of chorea Huntington's account of the progressive chorea of adults, Gull's description of myxedema, Addison's paper on the adrenals and his description of pernicious anemia Bell's account of facial palsy, Colles' law, Corrigan and his cardiovascular relations For example, not long ago, in prescribing Fowler's solution, I asked a student, who was Fowler? Of course he did not know, nobody else knew, I did not know myself, but last week we had an opportunity of hearing all about him Then again some of our most interesting reports have related to the use of drugs as for example, the history of the introduction of iron into practice, who was Blaud? the composition of the pill that bears his name, the introduction of iodid of potassium into practice The historical method used in this way has a very valuable place in the class room I can not too strongly commend to teachers the observation out-patient class for junior students Not only is the material of the very best sort, but in the long run it is a decided advantage to the patients in a dispensary to be made the subject of instruction for medical students, and, moreover, in an ambulatory clinic the student sees close at hand the unwashed maladies, not the distant prepared and altered picture of the amphitheater In a class of this sort the patient and the student do the most of the teaching You will see by the list of diseases that I am not particular, anything will do, so long as it has an educational value Occasionally a patient comes in whose malady demands a short explanation, but the primary importance of the class is to give the student a practical, objective, first-hand acquaintance with disease

(b) Physical Diagnosis and Clinical Microscopy—To train students in the use of instruments of precision is a slow and difficult matter A large portion of the time of the third year is occupied with the class work in physical diagnosis and clinical microscopy During the first two terms the associate professor of medicine Dr Thayer, with a staff of assistants, drills the class systematically in the use of the stethoscope and the methods of examining the heart, lungs and abdominal organs Here again the out-patients are used in the large teaching room adjacent to the Dispensary Special cases are also taken from the wards Plenty of time, oft-repeated opportunities and intelligent supervision of patient and student are the essentials in teaching physical diagnosis A valuable addition to this teaching is a course in medical anatomy given by one of the instructors in the anatomical laboratory

A necessary adjunct to a modern hospital is the clinical laboratory, in which students can work, and in which they study systematically the methods of investigation of the blood sputa, urine and secretions Twice a week from two to four in the afternoon, the third-year class is drilled in these methods by Dr Emerson the resident physician in charge of the clinical laboratory Familiarized thoroughly with the use of the microscope by prolonged laboratory courses in histology and pathology in the previous years, the student is ready to appreciate the modern clinical methods for investigating disease which are so essential in diagnosis Fig 4 shows the class at work I may remark that the clinical laboratory is in immediate proximity to the wards, and has accommodation for about 110 students As each student has his own place throughout the session and his own microscope, the laboratory becomes in reality what its name indicates, and to it the student goes at his leisure to work at his specimens, or for private research Conducted properly, with a protracted course and ample material, this class becomes one of the most popular as it certainly is one of the most useful, in the curriculum

(c) History-taking—To take a good history, to take one in a methodical manner, and last, but by no means the least, to put it down in a legible, attractive manner, takes careful training and much practice In the observation class opportunities are offered which familiarize the student to a certain extent with the methods of procedure, but during the last term of the course groups of students in rotation take the histories of the out-patients, and these are supervised by the corps of instructors During the summer small groups of the students are assigned for work in the out-patient rooms, and they in this way are able to get additional practice in this all-important art

(d) The General Medical Clinic—This part of the work I will describe more fully in a few moments in relation to the work of the fourth year I may here say that the third-year students participate actively in it From them the committees on pneumonia and on typhoid fever are selected, and they are sometimes asked to report on special subjects before the class

In addition to this work in general medicine, we have thought it advisable to place the subject of clinical neurology in the third year The student comes to it fresh from a very thorough training in its anatomical and physiological aspects and there is no department of medicine in which the practical application of these two scientific branches is more immediate than in diseases of the nervous system In the neurological dispensary, under Professor Thomas, a very similar method is followed, so that in seeing the work of the clinic twice a week and taking histories they get a very fair knowledge of the more common diseases Altogether our experience of the past five or six years warrants the conclusion that by this method the junior student is given a good start in the right direction which, as Plato somewhere remarks, is the chief value of education The special advantage of the method is that throughout the entire session the student is brought into intimate contact with the patients and is enabled to familiarize himself quietly and without any rush or hurry, with the use of the instruments of precision in clinical work Of course we direct the reading in a certain measure I encourage them to begin at once to read one of the medical weeklies, and to keep up their French and German by glancing, at any rate, at the *Berliner* or the *Deutsche Medicinische Wochenschrift* and also *La Semaine Médicale* or the *Progres Medicale* Sometimes I refer them specifically to a journal article, more frequently to some article in "Allbutt's System" or in "Nothnagel's Handbuch"

III THE WORK OF THE FOURTH YEAR

This consists of three distinct parts

(a) The Clinical Clerks and Ward Work—The group of fourth-year students, which numbers usually between fifty and sixty, is divided into four sections, each one of which serves for two months in rotation in the medical, surgical, gynecological and obstetrical departments of the hospital, either as clinical clerks or as surgical dressers Six beds are assigned to each clerk, who is responsible for the history of the case, the daily records, and who personally does all the blood and urine work, or any minor operations that are required in connection with the cases On three mornings of the week, from nine to eleven, I make the visit in the wards with the clinical clerks The histories of the new cases are read, the patient examined questions asked, and in general a Socratic method of instruction is followed On the alternate days the associate in medicine and first assistant, Dr Futcher, takes the group of clinical clerks at the same hour, so that they have routine instruction daily in the wards from nine to eleven It is in the ward, after all, that the student must learn to recognize and to treat disease The work of the third year is but preliminary and introductory to a routine daily systematic instruction at the bedside He has an opportunity of watching the cases day by day, of which indeed, under the supervision of the house physician, he practically has charge The house physician in each ward is also a teacher, superintending the records helping the clinical clerks in the conducting of examinations, who receive from him in all directions friendly advice and assistance Cases of typhoid fever or of pneumonia, studied in this way day by day, give to the student that practical acquaintance with disease, in which the very essence of the teaching of medicine consists Then he has an opportunity, too, of learning all the minutiæ in practice that are so important—the supervision of the tub-bath, the preparation and giving of enemata, the mode of giving medicines and the study of their action, all these he sees as a part of the routine work

Figure 4

I have only one criticism to make The period of time occupied in medicine is only half as long as it should be, and each senior student should serve in the wards for at least three months, or, better still, for six months One point has to be taken into consideration We have adopted the concentration plan, and the group of clinical clerks in medicine when on duty in my wards have that as their major subject, and are not specially pressed by other work, but I feel it would be very much better to extend the length of service

I meet my clinical clerks one evening in the week

for an hour and a half or two hours and discuss in a friendly social way the events of the week This too, gives me an opportunity to talk for a quarter of an hour or twenty minutes upon some subject of general interest relating to the history of medicine, or to some special disease in which they are interested Once a week also, Dr Futcher, my first assistant has a general meeting of the house-staff in which matters relating to the teaching and general work come up for discussion

We lay much stress and emphasis on the character of the work done in the wards It counts in the final estimate and the house physicians and my first and second assistants are consulted with reference to its quality

(b) The General Clinic in the Amphitheater—At twelve o clock on Wednesday I hold a clinic at which the general experience of the week is discussed The clerks are grouped in the arena and the cases of interest are presented The clinical clerk reads the history and if it is a fever case puts the chart on the blackboard Fig 6 gives a view of the clinic, with the professor and student discussing the problems of a case I like the clinical clerk and the patient to do the teaching adding comments here and there or asking the former questions, sometimes giving ten or fifteen minutes talk on some special feature or on a group of cases The fatalities of the week are discussed and the specimens shown in which way the clinical pathology of the diseases is considered the mistakes in diagnosis acknowledged and corrected and many valuable lessons learned Cases are reported which may not have been before the clinic though many of the third and fourth year classes may have seen them in the Dispensary or in the wards

As I mentioned, junior and senior students attend this class, and as far as possible we try in it to discuss the great diseases as they come with the seasons During the first term we discuss malaria and typhoid fever, and at every clinic cases are shown and the features of the diseases discussed From November 1 to April 1 there is one monotonous bill-of-fare, pneumonia, while in the spring the clinical diet is more diversified I often tell the members of the observation class that they need to know but one disease well—syphilis—as in mastering it they will grasp a greater range in general and special pathology than in any other affection In the Wednesday clinic I try to present during the session all the clinical phases complications and sequelæ of the two great acute infections typhoid fever and pneumonia The entire experience of the hospital is presented to them without, so far as is possible, the omission of a single detail of importance Early in the session committees are appointed to report on certain diseases, particularly those just mentioned During the months of October November and December the first question asked at the clinic is How are the typhoid fever patients? and so far as possible every case presenting features of interest is if not shown at the clinic reported upon on or after the lecture Dr Futcher takes a group to the ward to see the patient should he be too ill to bring down On a blackboard, as shown in Fig 6 the Typhoid Committee puts in order of occurrence the complications and sequelæ of the disease, so that we can refer to them and that the students may copy them for reference As we have between 80 and 90 cases of typhoid fever during the session a student in the two years gets a very extensive knowledge of the disease at first hand Even greater emphasis is laid upon the teaching of pneumonia—the great acute disease, the present "captain of the men of death," to use a phrase of John Bunyan After December 1 the cases begin to come in, and, week by week until April or even until the middle of May, there is the recurring question, How are the pneumonia cases? Week by week the record is placed on the blackboard, as shown in Fig 7, and the clerks report on the new cases, on the progress of the old and the lesions of the fatal cases are discussed Questions of diagnosis, prognosis and treatment constantly arise, and by the end of the session a large amount of concrete, first hand information has been laid before the class Reference is frequently made to valuable papers in the literature, and I am glad again, and before this Society of which he is the honored Secretary to bear witness to the great usefulness of the series of exhaustive papers on pneumonia by Dr Wells The table gives the main facts of each case the arrow indicates a death As the number increases the mortality is given every week A final report is made by the Committee at the end of the session, and the cases are arranged in five groups

1 Croupous pneumonia proper
2 Ether and surgical pneumonia
3 Terminal pneumonia

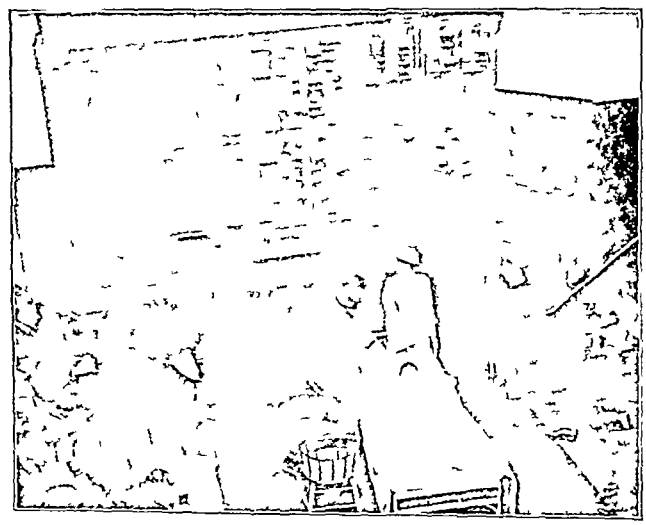

Figure 5

4 Cases admitted as pneumonia or diagnosed as such but which turn out to be something else
5 Cases admitted with the complications or sequelæ of pneumonia

As on an average about 60 cases occur during the session, the student during his third and fourth years gets a fairly comprehensive picture of the disease, And here let me make a brief digression I would rather teach medicine from pneumonia and typhoid fever cases than from all other diseases put together They remain the two great acute infections always with us, and of perennial interest It would do good if every teacher in the country would devote half the time of his clinic for the next few years to them alone That we have not done our duty in the matter of typhoid fever the experience of the Spanish-American War plainly showed The culpable ignorance on the part of practitioners of well recognized facts about the disease is to be laid at our doors Half a dozen lectures on the subject and the demonstration of a few cases in the amphitheater will not give men a working knowledge of the disease which can only be had by personal contact with patients in the wards Think of the thous-

ands of cases of typhoid fever in the hospitals of our large medical centers—how small a number are watched from beginning to end by our senior medical students, and yet it is in the wards alone that a saving knowledge of the disease can be obtained Of the natural history of no other disease is it so vital for the student to have a clear conception It is a malady moreover, of such surpassing interest and of such infinite variety, one, too for which we can do so much that the better it is known the more successful will the practitioner be in his warfare against it Of equal importance is it that the student shall know pneumonia thoroughly I spoke of it a few minutes ago as the captain of the men of death a term which John Bunyan applied to consumption In the recent March *Bulletin of the Department of Health* of Chicago Dr Reynolds the commissioner shows that here at least (and I believe the same holds good throughout the country) pneumonia now heads the list as a cause of death There were more than 25 000 deaths from it during the past decade in this city! Think too of the enormous advantages offered by the large hospitals for the study of this

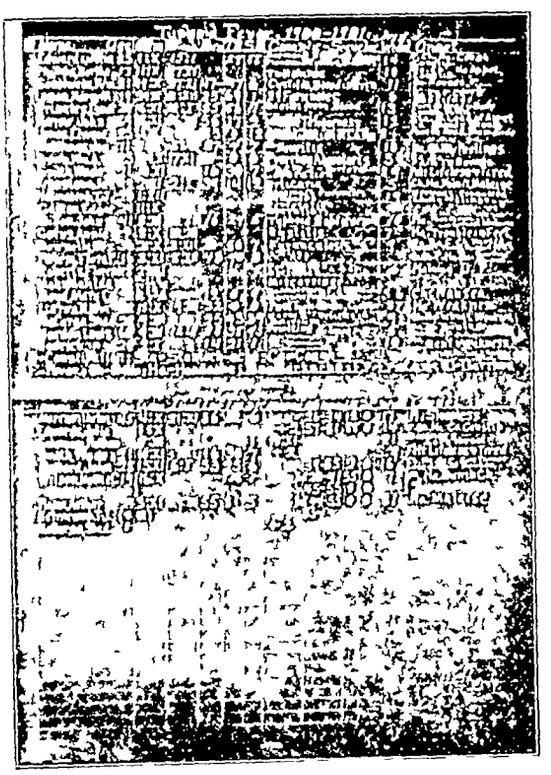

Figure 6

scourge, and yet here again I know that the student and patient have not always that intimate association which is so essential in successful clinical teaching

(c) The Recitation Class—Not all diseases can be studied by students practically Some as typhus fever, cholera and yellow fever are rarely seen now-a-days in this country Others, common enough, as the eruptive fevers of children, are not easy to teach In the absence of a proper hospital for infectious diseases we have to take our chances in Dispensary cases and the few admitted to the Isolation Ward As a rule, students need a supervision of their reading, and for this purpose a recitation class is held for the fourth year, in which every week a specific subject is considered and the students examined by Dr McCrae, one of the instructors

This, in brief, is the story of our work in medicine [1]

In his advice to students Erasmus urges them to read, first, the best books, and I am firmly convinced that the best book in medicine is the book of Nature as writ large in the bodies of men You remember the answer of the immortal Hunter, when asked what books the student should read in anatomy—he opened the door of the dissecting-room and pointed to the tables Erasmus further adds that the important thing is not how much you know but the quality of what you know and in the natural method of teaching medicine the quality is certainly of the best, since it is the knowledge grounded in personal experience, and out of which wisdom may arise That was a keen comment of Tennyson's when he said, 'Knowledge comes, but wisdom lingers,' indicating the difference between the two, a difference never better expressed than in the well-known lines of Cowper

"Knowledge and wisdom, far from being one
Have oftimes no connection Knowledge dwells
In heads replete with thoughts of other men,
Wisdom in minds attentive to their own
Knowledge is proud that he has learned so much,
Wisdom is humble that he knows no more

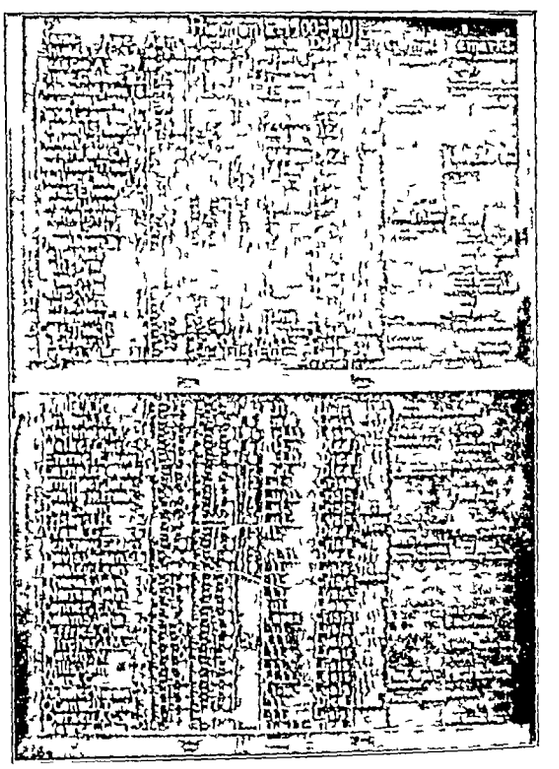

Figure 7

Here I believe, is the overwhelming advantage of the plan I have briefly sketched It starts the student with the avowed object of getting wisdom—the principal thing—the wisdom gained from experience not simply knowledge gained from books, and a clinical sagacity which may make him a helpful sensible Doctor Of this I am assured, that he will be the best

1 As I stated, there is nothing new in the method, by which in fact rational medicine was introduced by the Greeks In a remarkable chapter in his work on "Greek Thinkers," Vol I (Scribners 1901), Professor Gomperz pays a splendid tribute to the influence of Hippocrates and his colleagues in fostering the growth of positive or rational science He writes It is the undying glory of the medical school of Cos that it introduced this innovation (the habit of careful observation) in the domain of its art and thus exercised the most beneficial influence on the whole intellectual life of mankind 'Fiction to the right' Reality to the left was the battle cry of this school in the war they were first to wage against the excesses and defects of the nature philosophy Nor could it have found any more suitable champions for the serious and noble calling of the physician which brings him every day and every hour in close communion with nature in the exercise of which mistakes in theory engender the most fatal practical consequences has served in all ages as a nursery of the most genuine and incorruptible sense of truth The best physicians must be the best observers but the man who sees keenly who hears clearly and whose senses powerful at the start are sharpened and refined by constant exercise will only in exceptional instances be a visionary or a dreamer

practitioner who begins his life work is a student among patients learning for himself under guidance how to observe how to think learning what disease is and how it is to be treated Years ago my preceptor Dr Bovell placed in my hands Latham s "Clinical Medicine and he marked a passage which contains the alpha and omega of clinical teaching, and with it I will conclude "In entering this place speaking of the wards of St Bartholomew s Hospital "even this vast hospital where there is many a significant and many a wonderful thing, you shall take me along with you and I will be your guide But it is by your own eyes and your ears and your own minds and (I may add) your own hearts that you must observe and learn and profit I can only point to the objects and say little else than 'see here and see there '

RELATION OF THE MEDICAL PROFESSION IN THE TWENTIETH CENTURY TO THE TUBERCULOSIS PROBLEM

S A KNOPF MD
NEW YORK CITY

At no epoch in medical history has the tuberculosis problem been treated by the medical profession with more energy more enthusiasm, and more success than at the present time This awakening to the danger of tuberculosis particularly in its pulmonary form consumption is primarily the result of the labors of four great men Villemin[1] Koch[2] Cornet[3] and Frankel[4] It was Villemin who first showed beyond a shadow of doubt the transmissibility of tuberculosis and its infectious character To Koch we are indebted for the proof of the microbic origin of tuberculosis to Cornet and his pupils for the demonstration of the infectiousness of tuberculous dust and to B Frankel for the very interesting experiments in drop infection

From the works of the men whose names we have just mentioned we learned not only the true etiologic character of tuberculosis but also how to prevent infection The prophylaxis of tuberculosis has become an exact science and is now practiced in all civilized countries with more or less rigor Wherever it is practiced with the greatest rigor the mortality from consumption has correspondingly decreased Thus we have in Paris 4 9 deaths from phthisis pulmonalis for every 1000 inhabitants in Vienna 3 81 in New York 2 26 in Berlin 2 19 and in London only 1 87 deaths from consumption in every 1000 inhabitants

The curability of tuberculosis was pathologically demonstrated as early as 1838 when Carswell[6] wrote "pathological anatomy has perhaps never given more decisive proofs of the curability of a disease than it has given for pulmonary consumption Clinical evidence goes as far back as to the Arabian school Avicenna[7] who lived from 980 to 1037, and his pupils recorded the first authentic cures of the disease It seems however in spite of the teachings of the masters of old that up to the middle of last century the medical men as well as the laity gradually came to consider consumption a divine visitation in the face of which all they could do was to fold their hands and await the fatal termination

Through the genius of Hermann Brehmer this nightmare of the incurability of consumption was at last dispelled His thesis for the final degree of Doctor of Medicine "Tuberculosis primis in stadiis semper curabilis is characteristic of the man s life work[8] He not only cured himself of consumption, but during the thirty years of his directorship of the Goerbersdorf sanatorium he cured thousands of patients suffering from pulmonary tuberculosis and made happy men and women of them and useful members of society The service which his most celebrated pupil Dr Dettweiler rendered to modern phthisiotherapy by inaugurating the rest-cure in the open air is certainly equally great[9] The Brehmer-Dettweiler method, which represents the open air and hygienic and dietetic treatment of consumptives under constant medical supervision must really be considered up to this date the only rational treatment the one which has given thus far the best and most satisfactory results

To our own country belongs the honor of first having given the benefit of this most rational treatment of consumption not only to the well-to-do but also to the unfortunate sufferers of limited or no means We may well be proud that we can say the first people s sanatorium for consumptives was begun seventeen years ago in the Adirondack Mountains, under the directorship of Dr E L Trudeau[10] the American pioneer in modern phthisiotherapy Of the great and good work this man has done we all know His example has been the incentive to many similar noble enterprises

The tuberculosis problem in our own country is nevertheless far from being solved Tuberculosis is and must always be considered not only in a purely medical but also in a social aspect Without statesmen without the municipality, without philanthropy this great tuberculosis problem will never even approach its solution The bulk of the work however must be done by the medical profession and I may perhaps say right here, not by the specialist nor the sanitarian or health officer, but by the general practitioner It is the family physician who sees the early cases of pulmonary tuberculosis, which are the most hopeful ones By his periodic examinations of all the members of the family he will not only often discover the very earliest signs and symptoms of the disease and institute immediate treatment, but by his familiarity with the constitutions of every one of the family he will inaugurate such preventive measures and treatment as will build up and fortify the only as yet predisposed individual to such a degree that it will make the invasion of the bacilli practically impossible

It seems as if the tuberculosis problem viewed in its modern aspect, will help to hasten the time when the physician s calling shall have attained its highest ideal —namely the prevention of disease The physician must not only be a healer but also a doctor that is to say a teacher Let us however, not forget that physicians are men, husbands and fathers and they want to live and support their families The true family physician should be paid and well paid for preventing disease The family who engages him should realize that the timely word of advice concerning the proper mode of living, hygiene and care is worth a good consultation fee

I go still further in my views on this subject by saying that even the poorest family should have a family physician whose duty it would be to care for them in case of sickness but who should also pay them regular visits at any other time as an advisor and teacher of home-hygiene and the proper mode of living Since the poor family will not be able to pay the doctor for his services he should be remunerated decently from the public funds

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* Address delivered by invitation before the Buffalo Academy of Medicine Buffalo N Y May 14 1901

I know I will be told that this would be Utopian and altogether too expensive to the community I will refute this statement and prove by figures that it would be cheaper for the community to engage well-trained physicians for families that are not able to pay their own doctor than to wait until they get sick and have to be nursed and cared for at public expense Since we are speaking of the tuberculosis problem only we will confine ourselves to this one disease Supposing a large community is obliged to take care of a thousand consumptive poor who come to its institutions in the incurable state of the disease to be nursed and taken care of until they die The average daily cost of a patient in the hospitals of our American cities is not less than one dollar and a half The average stay of a poor consumptive when he seeks the public hospital is as a rule nine months From the day of his entrance to his demise he costs the community at the very least $400 For a thousand patients this would make $400,000 It is well known that 75 per cent of early cases can be cured under proper hygienic and dietetic care in about six to eight months at a cost of from $1 to $1 25 a day as inmates in a properly conducted sanatorium

Statistics show that the death-rate from consumption is highest between the ages of 17 and 35, that is to say at a time when the individual should be a most useful member of the community, self-supporting if not supporting a family Those familiar with the life of the average American workman will know how he and his family often shrink from the thought of entering a hospital These men will make all possible sacrifices in order to keep the sick member of the family at home and provide such medical attendance for him as they are able to procure But timely and regular medical attendance is rather the exception than the rule among poor families where there is a consumptive invalid They will first try all kinds of quack remedies ask their druggist for advice or attracted by some glaring advertisement of a sure cure of consumption fall into the hands of some unscrupulous charlatan

It is evident that there would not only be a direct benefit to the families of the laboring classes from timely and judicious treatment of any of their consumptive members either at home or in a sanatorium but the community at large would be a direct and indirect gainer By providing medical attendance to families unable to pay a regular physician, or by placing the consumptive patient in time in a sanatorium, the pulmonary invalid has 75 per cent of chances of cure and is prevented from infecting his own kin and neighbors Seventy-five out of one hundred consumptive patients will be prevented from becoming burdens to the community All this would be direct gain to the respective municipality, but the indirect gain to the commonwealth by curing and making strong and useful citizens of seventy-five out of every hundred tuberculous persons who were otherwise doomed to death in the prime of life is well nigh beyond calculation

There is no doubt in my mind that tuberculosis as a disease of the masses can and should disappear in civilized countries, and it devolves upon us as medical men of the twentieth century to devise means and propose measures to our municipal authorities, state legislatures and philanthropists that will best accomplish this much-desired end The old Scotch proverb, "an ounce of prevention is worth a pound of cure,' is perhaps not more applicable to any disease than to tuberculosis and particularly phthisis pulmonalis We all acknowledge Koch's bacillus as the true etiologic factor in tuberculosis, but we also know that in health the accidental inhalation of a few bacilli, the swallowing of some tuberculous milk, or even a scratch infected with tuberculous matter, are rarely of any consequence The healthy nasal secretion is bactericidal, the ciliated epithelium of the upper respiratory tract is a physical hindrance to the bacilli The gastric secretions, too, are, in a large measure, bactericidal and the phagocytic power of the white blood-corpuscles is in the healthy individual, the best safeguard against the invasion of the bacilli

It is the badly-housed underfed, overworked people, weakened by disease intemperance and excesses, who soonest fall a prey to the tuberculosis bacillus We as physicians must insist that the dark, dreary, badly-ventilated tenement home and lodging house should disappear By giving to the laboring classes better tenements, where sunshine, light and air are plentiful with at least 600 cubic feet of space allotted to every individual, we will save many a one from becoming tuberculous

The underfeeding of the poor is perhaps more often caused by ignorance than want It may be a surprise to some if I say that because of ignorance there is more waste in the families of the poor in cooking and housekeeping than in the families of the well-to-do To combat this evil it will be necessary to introduce lessons in proper cooking and economic housekeeping into the curriculum of our girls schools What is saddest of all is that the underfeeding of the poorer classes extends to the children, especially during their school age, when the organism is growing rapidly and the desire for good and abundant food is most pronounced The child of poor parents gets up in the morning, takes a hasty breakfast of mush and milk and then runs off to school with a few crackers in his pocket or a penny or two with which to buy a roll It is evident that such a child can not resist the invasion of any serious disease, and certainly not that of tuberculosis The need of giving to children of the poor while attending school a substantial meal at lunch time has been realized in some German cities, and in our country in the city of Boston In the latter city with the sagacity characteristic of Boston people when dealing with philanthropic problems, these lunches are, however, not entirely free They feared, and justly so, that to give these lunches away might have a tendency to pauperize In German cities they give meat sandwiches and a glass of milk, in Boston the lunches furnished to children are mainly nutritious soups milk or cocoa and crackers or plain buttered sandwiches The prices for school lunches, furnished by the New England Kitchen, of Boston, vary from 5 to 10 cents In German cities where this experiment has been tried careful statistics have been kept which showed that nearly every one of the children increased in weight from one to two pounds within a very few weeks, and their capacity for intellectual work had increased correspondingly I have said before that the cause of the malnutrition of the poor is often to be found in ignorance In a wealthy family, if a child or grown person grows thin in spite of plenty of food the family physician would be consulted, and not infrequently would discover the cause of malnutrition to be the fact that the food given to the patient was not the proper kind and with a change in the right direction the patient improves The poor alone have no one to turn to for advice they only go to the dispensary when they are really sick they have neither time nor are they

observant enough to discover slight ailments such as an impaired digestion or lack of assimilation conditions which are the true forerunners of consumption I say again give to every family too poor to pay for a family physician the right to select such a one and have the municipality pay for his services and the commonwealth will be the gainer at the end financially as well as in the saving of life

Whatever has been accomplished in some of our states in the direction of prohibiting child labor and in the regulation of working hours for adults has been accomplished through sanitary authorities that is to say, physicians They solicited the aid of wise statesmen and thus we enjoy at least in some communities humane laws in this respect We all know however how much more is to be done in this direction by taking children under 14 years and child-bearing women from the mines and factories

Phthisiogenetic diseases such as smallpox scarlatina measles la grippe, are all diseases which the earlier they are discovered the more chance there is of their taking a favorable course The one who discovers them first among the well-to-do is the family physician He may discover the early symptoms of these diseases on his regular visit before the sufferer himself has an idea of being a patient In the family of the poor the disease must be far enough advanced for a layman to discover it before medical aid can be expected Let me here show the great good which is accomplished by school physicians in communities which are wise enough to inaugurate such truly efficacious methods of preventing disease I can not plead strongly enough for the employment in every community of a sufficient number of skillful and competent practitioners as school physicians and a reasonable remuneration for their services The school physician during his daily inspection of the children will not only detect acute contagious disease such as variola diphtheria scarlatina measles etc but he will also detect chronic diseases such, for example as tuberculosis and through its early recognition and timely and judicious treatment save the life of many a child Of course a regular periodic examination of the chest of all the children would have to be a part of the work of the school physician

Venereal diseases excesses and intemperance may be classed under one heading and may be called a trinity of evils resulting from ignorance While the social reformer and clergyman may do their grand work in helping to combat them I claim that here again the family physician has to do the bulk of the work The latter who should be, and I am glad to say often is the confidential friend of every one of the family old and young, will more than anybody else, be able to warn the young man of the danger which besets him when starting out in life If a member of the family has been unfortunate enough to contract a venereal disease the family physician will see that proper treatment is instituted and all precautions taken to prevent further infection Again it is the family physician friend and advisor who may exert the most beneficent influence on old and young by pointing out to them the danger of excesses of any kind, and particularly intemperance for let us not forget that alcoholism is one of the most important phthisiogenetic diseases In European sanatoria for tuberculous and scrofulous children statistics show that more than 25 per cent of the little inmates are of alcoholic parentage

The physician acquainted with the tendencies of the individuals entrusted to his care will know when to sound the note of warning He will be able to combat the idea which alas! is still very prevalent among the laity namely, that alcohol is a good remedy for consumption He will exert all his influence to show that alcohol is not a food, but when taken in excess, a dangerous powerful poison destroying body and soul, undermining the strongest constitution causing untold misery and want in many once happy and prosperous families With such a medical advisor given to him by a wise and beneficent government the honest but poor laborer will be protected from tuberculosis and other diseases and the moral influence which a true physician can exert in these environments must be of incalculable value to any community

Now however comes the question what are we to do with the countless individuals with whom prevention is no longer possible because they are already tuberculous? First we must decide whether or not it is wise to favor compulsory notification or registration of tuberculous cases If compulsory registration of a tuberculous patient who comes under the observation of a physician should mean additional hardship to the sufferer or his family I would certainly protest against such procedure If through such a notification the health officers would have a right to interfere with the hygienic and therapeutic management inaugurated by the attending physician I would also consider compulsory registration ill advised On the other hand, I think it most advisable that every physician should be requested in the interest of statistical as well as demographic science to report to the respective health authorities the age, profession and residence of every tuberculous individual under his observation Many of the underlying and not yet quite comprehended causes of some of the predisposing agencies to consumption may thus be discovered and the remedies found But as I have said no hardship to the tuberculous patient or his family should arise from this procedure As long as the patient and his friends obey the instructions given by the physician, so long should they remain unmolested I think the custom of the New York City Health Board which furnishes physicians with postal cards for reporting cases, is a most admirable one These cards read as follows

REPORT OF CASE OF TUBERCULOSIS

New York 190

Name of Patient Age

Sex Occupation

Residence

Previous cases in family and relation to patient

Do you wish an inspector to visit the premises and instruct the family regarding prophylaxis? Answer yes or no

M D

Residence

NOTE—Cases of tuberculosis will NOT be visited by an inspector from the Department of Health except upon the request of the attending physician

No reasonable objection can be made to such a procedure Every conscientious physician will see that his directions are carefully carried out The Board of Health might, however, aid him if it chose, by sending to the physician reporting cases of tuberculosis leaflets giving needed information to consumptives and those living with them additional verbal explanation on the part of the attending physician will enhance the value of such instruction leaflets In case of demise or removal a disinfection of the consumptive's apartments should become obligatory It may also be necessary if

the patient or his family wantonly disregards the hygienic precautions necessary to prevent communicating the disease to others, that the attending physician seek the aid of the health officer to enforce a proper hygiene However I repeat, let us not exaggerate the contagious nature of tuberculosis by adding unnecessary hardships to the sufferings of the consumptive his relatives or friends, for pulmonary consumption is after all, not a contagious but only a highly communicable disease The contact *per se* of a clean consumptive is not dangerous, nor is there any danger for those who live with such a one Treat the consumptive who is conscientious and does his very best to protect his fellowmen from infection with the utmost kindness and do not let him feel as if he was an outcast from society Let us as physicians of this enlightened age be intelligent workers in the antituberculosis crusade but I pray let us not become phthisiophobic nor encourage phthisiophobia

Let us educate the whole community to the true nature of consumption There should not be a city of any size in the Union without a society for the prevention of tuberculosis and these societies should be in contact with a great national society It is a sad fact that our great country is still without a national antituberculosis organization England has its "National Association for the Prevention of Tuberculosis", France has its "Oeuvre anti-tuberculeuse Germany has its 'Central Committee for Antituberculosis Work and even Russia has a 'Pirogoff Society for the Study of Tuberculosis" Within your immediate neighborhood across your beautiful Niagara Falls you will find an excellent organization under the name of "The Canadian Organization for the Prevention of Tuberculosis" with His Excellency the Earl of Minto, the governor-general, as honorary president and as president, Sir James A Grant M D, K C M G

I am delighted to learn that you have such an association in your midst under the name of 'The Erie County Anti-Tuberculosis Society, and it seems to me that the Pan-American Exposition would offer a good opportunity to appeal to all existing anti-tuberculosis societies of this continent or at least of the United States, to combine into the formation of a great American association for the prevention of tuberculosis It is evident that a great power for good would be exerted through such a national association The excellent results accomplished by similar societies in other countries should be a great incentive to us for emulation I trust that from the distinguished president of the Erie County Antituberculosis Society such an appeal for a union will go out and I am sure it will meet with universal success and appreciation

You know the aims of these societies are to educate the general public in the prevention of tuberculosis by lectures and the distribution of suitable literature, and to encourage the erection of sanatoria available to all affected Our Canadian brothers have, however added to the scope of their work by seeking the cooperation of life insurance companies, benefit societies, railroad companies, factory owners, and other organizations whose material interests would be benefited directly by the work of the association

Largely through the efforts of one of your own townsmen, my distinguished friend, Dr John F Prior we will soon have in the State of New York, in the Adirondack Mountains, a sanatorium for the consumptive poor This will, I believe, offer accommodations for from 200 to 300 patients Buffalo, as the second largest city of the state, will be entitled to the proportional number of fifteen to twenty beds To use the pictorial language of that great physician, the late Professor Dacosta of Philadelphia, this must seem like "a drop of relief in an ocean of woe' You should have your own sanatorium, created by your city government and with the help of the philanthropists of your own city This sanatorium, belonging to Buffalo, should be situated at not too great a distance from the city, but preferably in a well-drained locality where the air is pure and good water abundant Furthermore, you should have a city hospital for consumptives situated in or near the city, in a healthy spot where there is as little traffic as possible This institution should serve as a reception hospital for all cases of tuberculosis, the more advanced should be retained here, and those having a fairly certain chance of cure or marked improvement should be sent to the sanatorium A special city dispensary should be established for the treatment of ambulant tuberculous patients or for the control of such as have left the sanatorium cured or improved To guard the improved consumptive against relapse to guide him even after having left the institution, is a very important portion of the solution of the tuberculosis problem

Besides this there should be a special institution, in a particularly healthy spot for the treatment of tuberculous and scrofulous children Let us bear in mind that the cure of a scrofulous or tuberculous child may mean saving the life of a man or woman, for had they not been treated during childhood they might have succumbed to tuberculosis at maturity, or a few years later

As to the need of such institutions in your city, it would hardly seem necessary to say anything Every one is acquainted with the situation You have any number of tuberculous poor in your midst, for whom there is neither hospital nor sanatorium Many of them live in badly constructed buildings, and being without medical supervision infect their own kin and neighbors besides reinfecting themselves If they move they leave infected rooms behind them Dr Delancy Rochester Dr John F Prior and a number of others, more familiar with your local situation than I am, have repeatedly urged the establishment of such institutions, and I can only repeat here the forcible words of Dr Prior, as correctly as I can remember them, when he said "Let us treat the tuberculous patient at the right place and at the right time when there is still hope for their recovery, and not at the wrong place and the wrong time until they die'

That there is no danger to either nurses or help or to the neighborhood from a well conducted sanatorium or special hospital for consumptives, all those familiar with the institution work know very well Those who doubt these statements I must refer to the reports of the Adirondack Cottage Sanatorium, where not one case of contagion among the nurses has taken place in the seventeen years of its existence In localities where German institutions are situated statistics show that the mortality from tuberculosis has actually decreased in the surrounding villages since the establishment of the sanatoria [11] The clean habits of the inmates of the institutions, which the villagers imitated have doubtless been the cause of the improved sanitary condition of the respective villages

Supposing, then, you would have in your city the institutions enumerated above, if every family, poor or rich, would have its physician, the selection of the

proper cases for the respective institutions would not be difficult The family physician could cooperate with the institution physician and the most harmonious work could be accomplished I have pleaded in the first portion of my paper for the just remuneration of the family physician of the poor by municipal funds and have shown by figures that the commonwealth would be the gainer by employing and paying competent physicians for this work It would be unjust should we expect the physicians of tuberculosis sanatoria hospitals or dispensaries who labor for the same noble work and also indirectly save thousands of dollars to the public treasury to do this work for nothing The Massachusetts State Sanatorium for Consumptives the only institution of that kind now in operation pays its visiting and house staff well for their services This progressive state has learned that it is wise best and just to do so Let other states follow this example

In assuming the state or municipal care of consumptives we must prevent pauperizing There should be in every community a tuberculosis commission composed of people skilled in dealing with charity problems The duty of this commission which should be in the employ of the city or state must be to investigate every case applying for free treatment in an institution It is my belief that if a patient is able to pay the entire or a portion of the expense of his maintenance in a sanatorium he should be made to do so providing that the other members of the family remaining at home are thereby not exposed to privation or want

The scheme whereby the Germans are gradually coming nearer and nearer to the solution of the tuberculosis problem is I fear not practicable in this country There the state invalidity insurance companies which are under government control have been the means of reducing the mortality from and morbidity of tuberculosis in a most remarkable degree In Germany, the moment an individual enters upon the career of an ordinary laborer or servant he is obliged to be insured against sickness accidents and old age If he develops tuberculosis he is immediately sent to one of the many sanatoria of that country [12] The government authorities who are at the head of these state insurance companies, have long since learned that through a timely treatment in a sanatorium the tuberculous individual is most speedily and lastingly cured and consequently with the least expense

The insurance companies have erected several sanatoria but they are not sufficient to accommodate the large number of individuals who avail themselves of the privilege to enter these institutions for treatment Therefore the insurance companies have made arrangements with no less than seventy-eight German people's and private sanatoria and now have 5000 beds in all at their disposal to which to send their tuberculous invalids [13] In the United States not even our rich and powerful private insurance companies will insure a member of a tuberculous family much less a person suffering from incipient phthisis

In my humble opinion the tuberculosis problem can not be solved in any other way in this country at the present time than by methods I have endeavored to outline We must consider our social conditions and customs and treat the cause and the effect at the same time The American general practitioner of the twentieth century must be a physician sanitarian and teacher of hygiene His services in preventing disease should be considered as valuable, and more so than his services in curing disease The state must compensate him for whatever he does in the promotion of the health and wealth of the community To the American physician of the twentieth century will then belong the honor of having solved one of the most difficult medical and social problems of our time High as the ideal of the physician has always been from the time of Æsculapius to the present an intelligent American public will, through just and wise legislation enable the physician of the twentieth century to rise still higher To be a true doctor to attain the highest ideal of all, he must not only be a healer but a teacher as well

16 West Ninety fifth Street

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Original Articles

GUMMA OF THE SPERMATIC CORD, WITH REPORT OF A CASE

P R CAMPBELL M D

PROFESSOR OF SKIN AND VENEREAL DISEASES CHICAGO POLICLINIC CHICAGO

My reason for presenting this short paper is twofold 1 on account of the interest involved in the study of syphilis *per se*, and 2 on account of the rarity of its manifestations in this particular location namely, the spermatic cord Cases have however been observed in which a syphilitic enlargement of the cord has been diagnosed Thus Verneuil[1] has recorded a case of gummatous swelling of the cord in a patient who had also a gumma in the heart The specimen in this case was presented to the Society of Anatomy of Paris in 1856 The morbid growth was found after death to be the size of two fists, it occupied the scrotum and ascended along the cord as far as the iliac fossa The growth had been mistaken for a carcinoma during life

Lancereaux[2] gives details of a case in which, in connection with syphilitic disease of the testis and epididymis the cord was enlarged and swollen in several places, one of the swellings being as large as a chestnut Recovery took place under iodid of potassium Fournier[3] again mentions a case of syphilitic testes where the cord was involved In inherited syphilis also the cord may be affected A child under the care of Obedenare[4] with enlargement of the testis had also enlargement of the spermatic cord However late syphilis seems very rarely to attack the cord independently of the neighboring or connecting structures

Morrow[5] says that on one occasion, in the case of a gentleman who had contracted syphilis some years previously he observed the appearance of a painless quite

firm tumor which attained the size of an almond, in connection with the cord of the left side, just outside of the external ring Under mixed treatment this soon disappeared

Bert[6] reports a case in which both spermatic cords were affected On one side absorption of the nodules took place under specific treatment, while the nodules on the other side broke down and discharged a gummatous material the remaining scrotal structures being apparently free from disease

Heliot[7] reports two cases, the correct diagnosis of which is open to question

Kocher[8] observed two gummata in the spermatic cord of a patient one of which was as large as a goose egg

M Von Zeissl[9] observed a suppurating tumor of the right side of the scrotum involving the vas deferens The tumor was irregular elastic and of the size of a pigeon egg The patient presented a relapsing syphilide

Mauriac[10] describes a case of a solid tumor of the right spermatic cord appearing ten years after the first manifestations of syphilis and draws attention to the extreme rarity of specific affections of the cord alone

Reclus[11] reports two cases of syphilitic inflammation of the spermatic cord, with stiffening and rigidity of the vas deferens

Goldenberg[12] reports an interesting case with microscopic findings of a round sharply circumscribed hard mass apparently cystic to the touch about 2 cm in diameter situated on the left posterior surface of the scrotum about one-quarter of an inch from the raphe The testicle and epididymis were perfectly normal

Brossard[13] says syphilitic gummata are present in the form of small nodules which are painless intimately connected with the spermatic cord, surrounded by its tissues and entirely distinct from the testes They seem to be smooth and elastic to the touch In the two cases which came under his observation, they did not show any tendency to soften or to ulcerate nevertheless we should not from this conclude that such a course or termination is impossible or even improbable His first case died from an intercurrent affection, and in the second case the gumma had been removed by a surgeon a short time after its development

I report the following case C S presented himself for treatment in 1897, with a history as follows In the fall of 1890 a sore appeared on the right side and about the middle of the shaft of the penis four weeks after intercourse followed by enlarged glands, chainlike in character, affecting only the right inguinal region There was no pain nor tenderness on pressure, and this was followed by a roseola eruption Early in 1891 mucous patches appeared in the mouth and on the fauces In 1897 when the patient came under my care he complained of pain and tenderness along the left tibia from the knee down to the ankle the pain becoming intensified at night On the right foreleg five ulcerating gummata presented kidney-shaped, with undermined edges, and emitting considerable serous discharge The ulcers had existed for about nine months and promptly healed under the potassium iodid treatment, but as is usual in these cases the patient then disappeared In August, 1899, he again presented himself with a firm, painless tumor, about the size of an almond, presenting just outside the external ring, in connection with the cord of the right side This promptly disappeared under the iodid treatment and inunctions of vasogen mercury 33 per cent, since which time no further syphilitic manifestations have been noted

It has already been stated that the spermatic cord in syphilitic affections of the testes and epididymis is very seldom involved It occurs less frequently as an independent manifestation

Neumann[14] says "Usually one finds on palpation that the cord inside the scrotum is decidedly thickened, so that the individual parts can not be differentiated, the consistency is decidedly increased, at times it is even of cartilaginous hardness In most cases this thickening extends from the epididymis to the cord, occasionally, however, there is an intervening normal portion between the epididymis and cord The surface is sometimes smooth, sometimes uneven or tumor-like The tumor, as a rule, is sharply defined solitary and unilateral at times there are two, separated one from the other sometimes touching each other They are generally round or oval, varying in size from that of a cherry to that of a goose egg With the large gummata, they extend into the inguinal region, or may involve the inguinal canal A certain amount of pain, either spontaneous or due to pressure may be present When the tumors attain the size of the testicle the skin will be stretched the folds of the scrotal skin will be more or less obliterated, slightly reddened without any marked symptoms of inflammation At the external ring can be felt a constriction sometimes superficial, sometimes deep In large gummata which extend into the inguinal tract the coverings of the cord are changed, just as they are in gummatous orchitis

"The diseases of the testicle and epididymis come chiefly into consideration in the differential diagnosis In those extremely rare cases of independent syphilitic diseases of the cord the presence of other symptoms of syphilis and evidence of previous syphilitic diseases are to be considered In some cases the diagnosis can only be made by the result attained by antisyphilitic treatment

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SURGICAL SHOCK

WILLIAM H GERMAN, M D
SURGEON TO THE C R I & P R R
MORGAN PARK, ILL

Shock is a condition of sudden depression of the whole of the functions of the body due to powerful impressions upon the system by physical injury or mental emotion Its more obvious manifestations are lowered activity of the cardiac, respiratory and sensory functions The symptoms of shock may present all degrees of gravity, from profound collapse quickly succeeded by death to a mere temporary impairment of mental vigor with transient diminution of muscular energy and a

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slight irregularity of the heart's action signs which it is very hard to distinguish from syncope if indeed it is possible

As shock is a disordered function and due to no structural change its pathology is obscure and difficult to determine The term 'shock' has been employed indiscriminately to describe all cases of sudden death following injury without hemorrhage and in which post-mortem examination failed to reveal any visible or adequate cause As accuracy of diagnosis has increased many cases formerly classed as shock have been eliminated and opinions as to the pathology of true shock have crystallized into two leading theories based on certain functional disturbances in the vascular and nervous systems respectively One of these theories is that the phenomena of shock are produced by the suspension of the nervous power manifesting itself through the circulation resulting in paralysis of the heart and abdominal vessels, and of the whole vasomotor system The great mass of blood stagnates in the abdominal arteries and veins and the heart muscles are insufficiently supplied with oxygen and are unable to force the small amount of blood through the empty vessels

The other and better theory, which seems more fully to account for all the phenomena of shock is that it is due to irritation of the peripheral ends of the sensory and sympathetic nerves and a general functional paralysis of the nerve centers both spinal and cerebral, which causes arrest or enfeeblement of the cardiac action and disturbed respiratory action Death from shock may be immediate and result from cardiac arrest Post-mortem examination of these cases usually shows the right cavities of the heart and great venous trunks distended with blood

The symptoms of shock are of two general kinds those due to a stunning or blunting of the vital powers and called torpid shock, and those attributable to mental terror or agitation, and called erethistic shock or prostration with excitement As types of these two classes I desire to present two cases strikingly similar as to character and extent of injury and yet showing the most marked contrast in symptoms

The first of these was a woman 19 years old injured in a gasoline explosion The patient lay conscious, yet dazed seeing with the eye but apparently failing to perceive with the brain hearing but not heeding, or replying only to loud and persistent questions the eyes dull vacant motionless, the face animated by no expression, but pale and bathed in cold, clammy sweat the features contracted the finger-nails blue, the body and limbs occasionally convulsed by a shiver, the pulse irregular and very rapid the respiration slow and irregular, deep sighing inspirations alternating with shallow and scarcely audible ones Her temperature was 2 degrees below normal Reaction could not be induced and death occurred in five hours the patient having merely "paused in the act of death"

The second case was a man 21 years of age scalded by steam from a locomotive in a railroad wreck There were the same physical signs of shock as in the torpid case so far as pulse respiration pallor and coldness of the surface were concerned In addition there was the most extreme and unceasing restlessness and excitability The patient tossed wildly from side to side, complaining of a fearful oppression and want of breath, shouting in the most piercing tones and using the most profane and obscene epithets with a countenance expressive of intense anxiety and the keenest agony Consciousness seemed unclouded but preoccupied by the mental and physical anguish, questions being answered if at all, in a loud and angry tone the intervals occupied with morning exclamations There was burning thirst and fluids were swallowed eagerly In short, this case well illustrated the comprehensive description of Gross who says that in shock "the machinery of life has been rudely unhinged" This condition persisted in slowly lessening intensity for twenty-four hours, when reaction was fully established

From ordinary uncomplicated shock recovery is usually complete Occasionally however, a permanent impairment of health follows, as in a case coming under my care in which a man of 35 years was entangled in a coil of live electric wires Shock was decided but not profound and recovery seemed perfect The patient, however soon began to show a change of disposition Formerly cheerful amiable and kindly he became moody, sullen and uncertain of temper, and in an attack of pneumonia some ten months later developed homicidal tendencies, and died in acute mania In this case, doubtless organic change of the nerve centers had supervened

A predisposition to shock may exist in persons of sensitive nervous disposition or in the subjects of organic disease, especially of the heart or kidneys

In those cases of sudden death, formerly classed as secondary or delayed shock cases in which an interval of hours or even days has elapsed after an injury or an operation without the appearance of any untoward complications some other explanation must be sought No theory of nerve injury remaining latent for days and then suddenly manifesting itself with such violence as to terminate life in a few hours, is sufficient The explanation may be found in pulmonary edema, or in renal congestion, pre-existent or developed as a result of an anesthetic, in concealed hemorrhage or in septic collapse from the sudden absorption of poisonous matters by a large serous surface, such as the peritoneum Or it may be found in fatty embolism that is embolism of small arteries of the lungs, and very commonly of other organs, due to minute drops of fluid fat which, having been set free somewhere in the periphery—generally in connection with the medullary cavity of bones—are carried into the circulation and follow its ordinary course It is not easy in all cases to account for the force which is necessary to cause the oil drops to enter the veins Sometimes the nature of the accident itself will give a reason for it, in the crushing or laceration which includes bones muscles, subcutaneous fat and vessels alike In other cases it has been suggested that the liquid fat from the broken-down cells stagnating in a wound is suddenly caught up when the stage of syncope passes off and the heart recovers, or it may be that from the commencement of inflammation there is a sudden increase of pressure and local tension In these cases the patient may after the accident experience primary or true shock, or may appear perfectly calm and unaffected, his pulse and respiration may be normal and there may seem to be nothing wrong, but after some hours or days the pulse becomes quicker and softer, the eye bright and restless, the respiration embarrassed, the extremities cold and exhaustion or coma and death may supervene A brief history of a recent case will illustrate

The patient was a man, 25 years old five feet seven inches in height weighing 180 pounds and presenting an appearance before the accident of perfect health He fell unnoticed from the platform of a passenger train moving at the rate of about fifteen miles an hour, was

found within five minutes after the accident, and at once removed on a stretcher to his home, about one-third of a mile distant A simple oblique fracture of the left femur at about the middle of its shaft, was the only injury found Shock was marked, though not extreme Some rigors and vomiting occurred and the heart was weak Heat was applied and a hypodermic of morphia and strychnia and a small amount of whisky were given Reaction was soon established and the fracture was reduced and dressed The patient passed a good night and seemed to be doing perfectly well in all respects About fifteen hours after the injury he began to be drowsy and a slight but persistent cough developed Soon the pulse increased in frequency and the respiration showed slight embarrassment These symptoms except the cough grew steadily worse He roused with more and more difficulty and less perfectly until in four hours coma was complete The pulse became very rapid and irregular the respiration became stertorous and finally assumed a Cheyne-Stokes character, the surface of the body became cold and cyanotic and twenty-three hours after the accident the patient died

At the autopsy fat was found in the heart lungs liver and kidneys The lower lobe of the right lung was hepatized and the blood-vessels of the brain were filled with dark fluid

As to treatment in this class of cases the measures suitable to true shock are of most value as heat opium strychnia digitalis alcoholic stimulants and intravenous infusion or hypodermoclysis of normal saline solution

When fracture or crushing injury of large bones has occurred it is very important that the limb be immobilized as soon as possible, so that the freeing and absorption of fat cells may be prevented

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NON-CONSTRICTIVE DRESSINGS FOR FRACTURES

J F PRITCHARD M D

DISTRICT SURGEON TO THE C & N W R R CO
MANITOWOC WIS

It should be our aim and object in the treatment of diseases and injuries to under no circumstances interfere with the beneficent effort of Nature In the treatment of fractures with our cumbersome splints and dressings with many and constrictive forms of bandages of myriad name and nature with material in some cases so heavy as to make the patient weary with its ponderosity is it not time to stop and review the whole subject of this form of treatment and study it in its simplicity aiming to aid and not retard Nature in her effort at repair We should remember that all indications are fulfilled if the broken fragments of bone are in apposition and at rest This idea of rest applies to all injuries but at this time I wish to limit the question to the treatment of fracture, although the principle is the same, in a large measure, to all

We all know that an unimpeded circulation will give a more rapid healing process than if impeded in the slightest degree And why should we disturb the circulation? Can we so apply our dressings as to meet all indications in the treatment and yet not interfere with the circulation? I think we can in nearly every instance

I am well aware that this is contrary to ordinary teaching, and you may answer that it can be done in but few cases It will surprise you, however to find in how many cases, and what fine results you will have without constrictive dressings

The old and well-tried fracture-box is one of the forms in which the principle is applied partially, but here we have lateral pressure and thus far defeat the plan of avoiding any interference with the circulation There is for all fractures of the leg and thigh a plan of suspension that meets all requirements By means of an iron rod properly bent, the so-called Hodgen's splint is a form that can be easily used and is almost always available It can be made in a few minutes by an ordinary mechanic, or by the surgeon himself if he has the proper mechanical skill to practice his profession Additional to the rod, a few safety-pins, a piece of cloth to make a suspension for the leg, a cord to suspend the leg when the splint is adjusted and your dressing is complete It can be used in all cases of leg and thigh fracture and can be adjusted to any degree of flexion by merely bending the rod at the knee, extension can easily be applied by adjusting the bed to the point of attachment of the cord to the ceiling Many surgeons will agree as to its usefulness in fractures of the leg, but if you will study recent reports you will find the best results in treatment of fractures of the femur by this means There should be no constriction whatever The patient can move about to a limited degree in his bed and he can not displace the fragments if the ordinary mechanical principles are complied with

Compound fractures can be as easily and comfortably dressed as if the fracture were uncomplicated If a foot-piece is needed, it can be made by cutting in a piece of board at the proper angle and by means of wedges this can be adjusted to completely support the foot, but in most instances the needed support to the foot is had by making a stirrup of a piece of bandage and attaching it to the splint higher up I do not insist on this special form of splint, but insist that the principle should be applied and mention this form only for its simplicity, availability and effectiveness

A modified form of application of Hodgen s consists in supporting the leg by short strips of bandage fastened on either side, preferably by safety-pins, to admit of free inspection of all parts of the injured limb without disturbance

For the arm the principle of non-constrictive dressings can be applied in a modified form, either by a trough or in some other simple manner I use bent wire In clavicle fractures, by requiring the patient to lie on his back on a firm smooth mattress, all indications are fulfilled and results are excellent

I need not mention the trouble and anxiety with splints and ordinary dressings, but wish to say that all ready-made splints remind me of attempting to fit every man with one pair of boots If you must use one, make it for the individual

Remembering the principle of non-constriction of the limb, the splint applied with plenty of padding and tied on with a very few strips of bandage is much better and far safer than one applied with the ordinary roller with many turns It is very easy to loosen or tighten the strips, but not easy to adjust the roller without cutting it entirely away

Plaster-of-Paris splints or casts should never under any circumstances be used for a primary dressing This may be very radical as a statement, but as a question of practical experience it is abundantly supported by many unfortunate results Do we consider how rigid a plaster cast is—that it contracts after being applied? How difficult, if it is causing pain or the limb be painful,

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to inspect the fracture or remove the dressing! Then you may ask when to use plaster—only when all swelling has subsided absorption of extravasated blood taken place and you wish to give your patient his freedom during convalescence Practically then use plaster-of-Paris dressing after the bone has united and you wish to protect the point of injury from possible results of attempting to move about Another point is under no circumstances use this dressing without plenty of cotton or other padding next the skin It is never proper to use plaster-of-Paris without this plentiful layer of cotton

There are many forms of retentive dressings which come and have a trial and are forgotten Many of them like wigan silicate, starch wire-cloth and others have advocates and all are useful but useful only when convenient We have these things in mind only to be applied when they are easily reached But under no circumstances can all fractures be dressed with one form of dressing or one kind of splint You can find bark or a limb of a tree in the forest that will make a splint to fit the case in hand and I believe that every surgeon ought to be able to dress his case of fracture with what he can find on the spot If he expects to manage such cases successfully he should have mechanical ingenuity to adapt conditions to his needs and not be helpless because he may not have his favorite dressings with him But these are all to be considered as temporary and applied to meet the needs of transportation and in all cases when the patient reaches his home or a permanent residence he should have a non-constrictive dressing and be made comfortable

I can give positive results from actual experience in many cases with this principle applied but one of each kind will be more than enough

CASE 1—A railroad brakeman had his leg broken by a derailment a car crushing him He received an immediate dressing of plaster-of-Paris and within a short time from constriction of the dressings the pain became unbearable and when first seen by me the dressing had been cut the leg was covered with large blisters, was very much swollen and still painful This visit was at night but by making a sketch and giving an ordinarily bright young man directions he brought a splint—Hodgen's—ready for use in less than an hour After suspending the leg and adjusting the short strips of bandage there was no further trouble, and healing was uneventful

CASE 2—An impacted fracture of the neck of the femur was treated with a similar splint and sand-bags with a good recovery, a useful limb and no unpleasant symptoms This patient was a woman very much emaciated and neurasthenic She now walks with scarcely a perceptible limp

CASE 3—A crushing injury of the leg was caused by a heavy log striking it in a man of 55 of phlegmatic temperament He was dressed in a fracture-box at first applied very loosely but swelling occurred to such an extent that I was obliged to suspend the leg and remove every form of constriction Enormously large blisters filled with bloody serum extended from the knee to the ankle the foot was cold and every appearance of gangrene occurred yet by suspension and non-constriction I succeeded in getting a result which being slow—about two months—was as perfect as if in a younger man with a better constitution In this case there was no possibility of saving limb or life with any form of constriction

CASE 4—This was similar to Case 3 in every way, as to constitution and conditions of the system The injury was a fracture of the malleoli with dislocation Four hours after the injury I found the patient as free from pain as if he had sustained no hurt, he had slept and was comfortable and yet there was complete displacement with laceration of all structures at the ankle-joint sharp fragments of bone pressing dangerously on the skin to such an extent that perforation was almost complete There was no sensation on reduction Blisters similar to those in Case 3 formed over the injured parts Similar open treatment was given with good recovery in a reasonable time

CASE 5—This was a fracture of the middle third of the femur with contusions of various parts of the body. The patient had been struck by an engine on a crossing Suspension non-constriction and healing without shortening was secured

In some of these cases any form of constriction would have produced disaster and if we get good results in our worst cases with such dressings how much better must be the healing powers in the ordinary case How much anxiety is saved by the ready inspection ease and comfort and gain in time to the patient!

ACUTE GLAUCOMA DEVELOPING IN A CATARACTOUS EYE, AFTER CATARACT EXTRACTION IN OTHER EYE IRIDECTOMY AND CURE

H N RAFFERTY, M D
ROBINSON, ILL

Among the more serious affections of the eye, there is not one which demands such prompt and proper attention as that known as acute glaucoma, or the so-called green cataract of the early writers And while it is the usual and every-day facts and phases of a subject which should demand our most considerate attention yet it is likewise true that we should be cognizant of the unusual and atypical in order that our mission may be best fulfilled Such is the excuse for that which is to follow

Glaucoma is said to be secondary when it occurs as a result of some previously existing disease of the eye, and complicating when it occurs in the presence of another eye affection but without apparent etiologic relation to the same The case in point probably belongs to the latter class though the distinction is largely a matter of individual opinion

Exclusive of nationality, the factors which predispose are old age with its accompanying changes hypermetropia and a small cornea Of these the first and last were present

Various theories have been advanced as to the mechanism of the disease most of which are no longer tenable since the demonstration of the nutrition processes and the path of the circulation of fluids in the normal eye[1]

A general review of the late literature on the subject leads one to accept these facts 1 That glaucoma is due to a disturbance of excretion rather than an increase of secretion 2 That this excretory blockade is accomplished by an abnormally swollen ciliary body pressing the iris-base against the periphery of the cornea to which it soon becomes adherent and in this manner causing a retention of fluid by closing the filtration angle 3 That the only reliable and safe method of treatment is broad peripheral iridectomy done early and under general anesthesia

1 De Schweinitz p 370

Noyes[2] says that iridectomy performed in one eye for the relief of glaucoma may occasion the outbreak of acute glaucoma in the other and previously healthy eye he having seen one instance of this It is to be presumed that the simple cataract extraction, in a case without evidence of glaucoma, would exert a similar influence, even though the iris was not cut This fact must be explained by reflex ciliary irritation

Numerous cases have been reported in which glaucoma followed cataract extraction—either simple or with iridectomy—in the eye operated on having usually been caused by peripheral adhesions of the iris Pagenstecher[3] divides these cases into two groups 1 those in which the process is a direct result of the cataract operation and 2, those in which it appears after the eye has regained its function He further says that it occurs more often after the simple than the combined operation, and that it may follow discission

Dabney[4] reports a case in which the instillation of two drops of a 1 per cent solution of atropia into the conjunctival sac of a man of 22 years suffering from a purulent conjunctivitis, induced symptoms of acute glaucoma In ten days vision had returned to normal It is interesting to note that the patient's mother had glaucoma

Treacher Collins[5] studied two cases of congenital and one of traumatic aniridia with glaucoma, in each of which the filtration angle was blocked—in the congenital cases by a stump of undeveloped iris, externally invisible and in the traumatic case by a pulling forward of the ciliary processes So much for these unusual traits of glaucoma, but as to the case in point, I have as yet seen no instance mentioned of acute glaucoma in a cataractous eye, following simple cataract extraction of the other eye Such was the case under consideration The clinical history is as follows

Mrs H D, an American 80 years of age, and housewife by occupation, was first seen on Aug 8 1900, when she was found to have binocular senile cataract She gave a history of having lost all vision in the left eye twelve years before, and that in the right eye five months before She had good light perception over the normal visual field in each eye On August 13 I removed the lens from the left eye making a 3 mm flap, and no sooner was the corneal section completed than the lens appeared in the wound and had only to be lifted out This occurred, as is sometimes the case, without any pressure being exerted and without capsulotomy, the lens escaping intact—due, no doubt, to the over ripe and atrophied condition of the lens, and to lack of adhesion of the posterior capsule to the lenticular fossa By this result we had no fear of cortical remnants, nor of capsular cataract The usual after treatment was adopted and recovery was uninterrupted

On October 5, or fifty three days after the cataract extraction in the left eye, acute glaucoma developed in the right, with premonitory symptoms for two weeks previously Tension was increased to +2 or +3, pain severe, paroxysmal in character and worse at night The cornea was hazy and anesthetic, the iris discolored dilated to a mere ring, and fixed

The object of treatment, from the beginning, was not necessarily to save vision, but to give relief in such a manner as to make our patient comfortable for her few remaining years

After temporizing with instillations of eserin, alone and with cocain, warm boric acid solution as a collyrium, hot compresses, and repeated paracentesis of the anterior chamber through the base of a large central corneal ulcer which had formed, a broad peripheral iridectomy was made on November 11, under cocain anesthesia—which proved rather unsatisfactory, owing to hardness of the eyeball

The patient complained of some indefinite pain for four or five days following, during which time the tension was slightly plus Since then she has been entirely free from pain, with tension about normal She is wearing a +11 00 sph over the left eye which gives a vision of 20/200

2 Diseases of the Eye, p 566
3 Klin Monatsbl f Augenh, May, 1895
4 Am Prac and News Feb 16 1889
5 Ophthalmic Review, April, 1891

SITOPHOBIA OF ENTERIC ORIGIN

MAX EINHORN, MD
Professor of Medicine at the N Y Post Graduate Medical School
NEW YORK CITY

Sitophobia meaning fear of food, is a condition which may last a long period of time and, if not successfully treated may endanger life It is therefore natural that this subject should command the full attention of the practitioner

When I first used the term sitophobia I was not aware that Guislain[1] had already employed the same word to designate the refusal of food which is so often encountered in cases of melancholia and in the insane For this condition, however, the word introduced by Sollier[2], namely, "sitiergy," meaning refusing food, seems to be more appropriate For, in the insane the patients do not want to eat, not because they are afraid of the food, but for different reasons, either they are in a state of depression, unwilling to do anything, even eating, or they have suicidal ideas, or they have illusions that the food may be poisoned, etc I may be therefore permitted to reserve the term sitophobia for those conditions only in which there is distinct fear of taking food on account of resultant bad consequences Sitophobia in this sense has nothing to do with the insane and is found in mentally perfectly sound people

In my paper, "The Diet of Dyspeptics,"[3] I have already alluded to the importance of sitophobia and its management

While, however, in the above article sitophobia is spoken of as occurring in cases of disorders of the stomach, principally those accompanied by pains, of late I had the opportunity to observe the same condition in persons who had no gastric symptoms whatever and in whom "the fear of food" was due to some intestinal difficulty I shall, therefore, in this paper speak of the latter group of cases, or of "stophobia of enteric origin"

A good illustration of the importance of this condition will be found in the following case which I beg to describe

William H, 28 years old, bookkeeper, had always been well up to two and a quarter years ago At that time he became constipated, which condition gradually grew worse, occasionally alternating with diarrhea Off and on, mucus was observed in the stool His appetite was good, but he suffered at times from headaches and disturbed sleep Patient consulted me for the first time in March, 1900, and was given magnesia usta in conjunction with ferratin and olive oil enemas after which he improved for awhile He went to the country, where his condition again became worse On his return to the city, in August, patient was given podophyllin pills which, however, did him no good He then went to another physician, who ordered some medicine and injections of water

These remedies not proving of benefit, patient again resorted to the podophyllin pills and injections every day, using both these means from September, 1900 to March, 1901 Often he would go without a movement of the bowels for seven to ten days During all this time he ate much less than he was previously accustomed to, because he was afraid "that he would get entanglement of the bowel" His weight steadily grew

* Read before the New York Academy of Medicine May 16, 1901

1 Guislain Eulenberg s Realencyclopädie der Medicin 1897 Bd xii, p 696
2 Sollier Revue de Medecine aout 1891
3 Max Einhorn Medical Record Jan 1 1898

less and dropped from 138 to 101½ pounds He became exceedingly nervous irritable and hypochondriacal Of late he felt so weak that he had to abandon his vocation At this time (March 1901) he again consulted me looking very badly and being hardly able to walk After undressing he looked almost like a skeleton every bone being visible not unlike a Roentgen picture

On examination besides this extreme condition of emaciation pronounced anemia was found The thoracic organs did not present anything abnormal while the abdominal cavity appeared somewhat caved in (almost trough-like) and showed an 'apparent tumor,' situated above the navel to the left of the spine There were no areas painful to pressure The urine contained neither sugar nor albumen The knee reflex was present

The diagnosis of emaciation due to inanition without any organic trouble was made and the patient treated accordingly He was advised to eat six times a day, a rectal injection of a pint of warm olive-oil was ordered every night and he was given internally calcined magnesia and ferratin He was told to eat plain wholesome food plenty of fruit bread and at least a quarter of a pound of butter daily He immediately improved his bowels became regular, and hardly a month later he weighed 128½ pounds, having gained on an average almost a pound every day He now looks the picture of health has ruddy cheeks feels strong and is able to take long walks without any fatigue

Another case not unlike the one just described is the following

Joseph W, 23 years old, ladies' tailor had been suffering for the last two years with digestive disturbances (fulness after eating and constipation) Six months ago he consulted me, complaining principally of severe constipation He was given tincture of rhubarb but his condition did not seem to improve much The appetite was not especially good and the constipation became more obstinate He was afraid to eat much as he believed the more he ate the more he would be constipated and the sooner he would have to resort to a cathartic He ate everything but only in small quantities He was also compelled to take a glassful of whisky in the morning on an empty stomach and two to three times during the day in order to be able to do his work He gradually became weaker, and lately lost 15 pounds His weight now is 110 pounds

On examination patient is found to be emaciated and pale The thoracic as well as the abdominal organs do not reveal anything abnormal The tongue is not coated Urine contains neither albumin nor sugar Patellar reflexes are present

The diagnosis of habitual constipation with sitophobia was made and the patient treated accordingly

In the two cases above detailed the sitophobia developed as a sequel to obstinate constipation The patients were afraid to tax the intestinal tract with much food as it was apparently unable to dispose of even small quantities of the most delicate aliments

I have however seen instances in which chronic diarrhea also gave rise to sitophobia Of the many cases I have observed I will report only one

Mrs X O about 33 years old had been complaining for the last four or five years of great flatulency and diarrhea She had four to six movements daily and one or two during the night—about 3 or 5 a m The dejecta were either watery or mushy and always contained a considerable amount of mucus Before an evacuation took place there was always a great deal of rumbling in the bowels accompanied by slight colicky pains and passing of flatus Her appetite was fair and there was no discomfort after meals Patient, however, was very careful in her diet, taking principally mutton broth, scraped beef and toasted bread, and of these very small quantities She was afraid of aggravating her trouble by partaking of more food Patient had constantly lost in flesh in the last two years altogether about 40 pounds She feels weak, complains a great deal of dizziness, a dry sensation in her mouth and restless sleep, and is unable to attend to her household duties

The physical examination shows that a condition of enteroptosis prevails The gastric contents do not reveal anything abnormal The fecal matter contains some mucus and a considerable quantity of undigested food

The diagnosis of enteroptosis and chronic enteritis is made Patient is put on a liberal diet—salads, fruits and coarse vegetables excepted—she is permitted to eat everything She is also instructed to partake of kumyss, and bread and butter between meals Besides the diet, patient is given tannigen (seven and a half grains three times a day) Under this regime she has steadily improved gained considerably in weight, and her bowel trouble has almost yielded to a great extent, although it has not entirely disappeared

Remarks—In the observations just narrated the sitophobia was marked and had its origin in the belief that the bowel trouble might become aggravated by partaking of nourishment to some extent Nor are these cases rare Sitophobia of a moderate degree is almost an every day occurrence in various intestinal disorders

Having emphasized the fact that sitophobia is met with in enteric affections it does not appear superfluous to describe its dangers and also its treatment

While in conditions accompanied by diarrhea the avoidance of food may for a short while exert a beneficial influence upon the intestinal affection, it is quite different in most cases of habitual constipation The latter condition becomes the more aggravated the less food is taken The constipation growing more pronounced the patient is still more afraid to partake even of the small quantities of food which he has hitherto managed to enjoy Thus there is a circulus vitiosus constipation causing sitophobia, which of itself aggravates the former affection

But even in diarrhea with sitophobia causing an insufficient quantity of food to be ingested, there is, after a short interval of apparent improvement, a relapse The deficient nutrition leads ultimately to an undermining of the constitution The natural resources for combating disease are weakened nervous symptoms manifest themselves Thus the diarrhea quite soon is again as bad as ever

Moreover sitophobia no matter what be its cause if left to itself is bound to endanger life A person who habitually is taking an insufficient quantity of nourishment is slowly starving, and if there be no change in the mode of living starving to death

It is hardly necessary to dwell upon the symptoms which appear in this state of subnutrition They are a host and hardly need any comment general anemia, and then anemia of the brain dizziness dryness in the throat extreme fatigue insomnia etc Occasionally I have met with albuminuria which promptly disappeared upon improving the nutrition

Another important feature of sitophobia is the habit which the patient develops of eating minute portions

The condition which has led to sitophobia may have been remedied and thus the sitophobia as such may not exist any longer, still the acquired habit of eating very little may persist This certainly can produce the same dangers to life as the original sitophobia

Treatment—The patient must be made to eat sufficient quantities of food, no matter what is the underlying condition causing the sitophobia, and no matter how this is done Sometimes persuasion alone is sufficient Occasionally in very pronounced cases of subnutrition an ample diet can not be adopted at once but must be arranged gradually accustoming the patient to more nourishment step by step In some instances various medicaments will be helpful in carrying out this plan, thus the bromids in nervous conditions or codein in painful affections Sufficient nutrition is the foundation upon which to build the structure of health The former lacking, no matter what treatment may be instituted, the structure will sooner or later collapse If a solid foundation is laid by a sufficient diet it is often quite easy to achieve perfect recovery For, the usual means of treatment will then prove successful in eradicating the primary disease

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THE RELATION EXISTING BETWEEN DISEASES OF THE CONJUNCTIVA NOSE AND THROAT

HERMAN H BROWN M D
Professor Didactic and Clinical Ophthalmology Illinois Medical College
CHICAGO

My purpose in selecting this subject is not that I have any thing especially new or original to offer, but rather because I feel certain that in our text-books and literature too little time and space are devoted to the intimate association which exists between the conjunctiva, nose and throat, and as a consequence faulty results are sometimes obtained in their treatment From an anatomic standpoint, we admit a close relation through the lachrymal channel and accept this as a most intimate and direct means of communication between the nose and conjunctival cul-de-sac, and do not hesitate to ascribe to certain conditions found in the nasal cavity the cause of disease so frequently found in the lachrymal sac and canal It is not however, to this direct means of communication and the generally accepted lachrymal diseases, which I desire to call attention, but rather to the class of cases more frequently met and to which less importance is placed upon this factor of association between the conjunctiva nose and throat

Relatively speaking, conjunctivitis in all that the term implies embodies as large and perhaps a larger variety of manifestations than any other disease in the domain of ophthalmology Mere mention of the classification of conjunctivitis found in our text-books to-day is sufficient to emphasize the above

And, then, as we turn to our text-books on diseases of the nose, nasopharynx and throat, we are again surprised at the varied manifestations of disease found here, admitting therefore, that the conjunctival cul-de-sac and the nasal cavities are alike so frequently involved in inflammatory change, with the intimate means of communication existing between these two tissues (via the lachrymal channel), etc, why should we not expect an association of tissue change? Besides the continuity of membranous tissue existing between the nasal cavities and conjunctiva, we have also an equally intimate association existing through the nerve and blood supply, and it might not be out of place at this time to review for a moment the blood and nerve supply of these parts, that we may the more readily comprehend their association Granting to the lachrymal canal a direct means of communication, we find that the mucous membranes of the nose and conjunctiva are supplied alike, by sensory nerves derived exclusively from the fifth or trifacial nerve The upper half of the conjunctiva is supplied by the ophthalmic division of the trigeminus, and the lower half by the superior maxillary division, the nasal branch of the ophthalmic division of the fifth passing from the orbit by way of the anterior ethmoidal foramen, to the anterior nasal fossa, supplies this fossa and the anterior one-third of the superior turbinals (Sappey and Morris), while the entire remaining part of the Schneiderian membrane is supplied by the nasal branches of Meckel's ganglion, the sensory roots of this ganglion are derived exclusively from the second division of the fifth, while other nasal and descending branches of this ganglion supply the soft palate, uvula, nasopharynx, tonsils orifices of the Eustachian tube, and Rosenmueller fossa Thus we see there is established a most perfect ramification of one and the same nerve (or branches of the same), reaching from the upper conjunctival tissue to the base of the tonsil Through the circulatory media we have also a more or less intimate association of the conjunctival cul-de-sac and nose, though not so intimate as the nerve supply We find from the internal carotid artery the ophthalmic branch entering the orbit, giving off the lachrymal, frontal and palpebral arteries, which supplies blood to the major portion of the conjunctival cul-de-sac while from the same ophthalmic branch we find the anterior and posterior ethmoidal arteries passing through their respective canals into the cranial cavities here, after supplying in part, the ethmoidal cells and dura, pass downward to the nasal cavity to supply the superior and middle sulcus of the anterior nasal fossa, as well as the anterior halves of the superior and middle turbinal bones The remainder of the nasal mucous membrane is supplied by the spheno-palantine and descending branches of the internal maxillary (Zuckerkandel) with a possible communication existing between this and the angular artery, through the foramen of the nasal bone

From the standpoint of the venous circulation, we likewise find fairly intimate association existing between the conjunctiva and nasal cavity We find a circle of veins completely surrounding the orbit—a perfect network or reservoir derived from the lachrymal, supra-orbital frontal, nasal, angular and transverse facial, draining the upper and lower eyelids and their conjunctiva and the angular vein lying upon the internal palpebral ligament possibly receives a vein through the foramen of the nasal bone, from the anterior nasal fossa (Gray and Quain) In the nasal cavity the veins form a deep venous plexus, over the inferior turbinal and posterior portion of the middle and superior turbinals, as well as lower and posterior portion of the septum, almost the entire plexus, drained by the spheno-palatine vein We find also a similar dense plexus extends around the nasal duct as far upward as the lachrymal sac, establishing a very intimate relationship between the mucous membranes of the nose and conjunctiva, through the lachrymal canal

It has also been suggested that a more or less direct communication between the conjunctiva and nose exists through the lymphatic, but according to Gray, Morris,

Testute Quain, Henley Cunningham Heath and Deaver no evidence of either direct or indirect association exists, as we find the Schneiderian membrane discharges its lymphatics into those channels following the internal maxillary artery ending in the deep lymphatics of the neck (Gray)

Admitting therefore, that the lymph channels play little if any, part in common in the disturbances under discussion we do admit a more intimate association by means of the arteries, and a still greater one through the venous association, while the nerve supply for each is practically one and the same and added to this is the lachrymal canal so generally accepted How, therefore, can we underestimate the importance of the association of disease in the nose and conjunctiva and as a most plausible explanation for this association, in the greater number of instances we should and most naturally do look to the most intimate means of connection between them, which (excepting the lachrymal canal), we must admit to be, through the nerve supply, and excepting certain well-established disturbances, such for instance as lachrymal blenorrhea, etc, due to membranous continuity it would seem that nerve reflex is our most plausible theory by which to explain the greater number of disturbances so frequently met, existing alike in the nose, throat, and conjunctiva, which theory I am forced to believe from my increasing daily experience It is true that we must ascribe to venous stasis or impaired return flow of blood a prominent place in the production of many catarrhal manifestations in the conjunctiva, resulting directly from nasal hypertrophies and the circulatory disturbances arising therefrom, which can be readily understood when we recall especially the venous circulation as it exists in these parts A very admirable reference of this circulatory disturbance in the nose is mentioned by Dr Edwin Pynchon in an article on "Impaired Ventilation and Drainage of the Nose as the most common Causes of Nasal Catarrh Granting the immediate cause in this class of cases to be circulatory, who can estimate the part played by the nerve reflex as well?

Cases illustrative of the purpose of this paper are too numerous to mention How frequently for instance, is the ophthalmologist baffled in his treatment of both acute and chronic conjunctivitis marginal lid troubles, etc, until proper attention has been given to an existing rhinitis or pharyngitis? One of the most common illustrations of this is found in phlyctenular conjunctivitis Here, no sooner is one attack of phlyctenules relieved, when the child is seized with a new cold and, the conjunctivitis is lighted up anew, with more phlyctenular ulcers perhaps This goes on, spring and fall, despite the ophthalmologist's best efforts, until the adenoid vegetations pharyngeal tonsils or nasal hypertrophies one or all have been relieved Whether the association of these diseases in the conjunctiva and nasopharynx in circulatory (impeded circulation) or nervous, or both is immaterial, the intimate association is plainly verified by the treatment, and to the physician who disputes it let him refer to his records of cases cured without due attention not only to the conjunctival disease but to that as well in the nose or nasopharynx

Another condition which is equally illustrative of this intimate association is chronic conjunctivitis Here our patient suffers with lid trouble for months and perhaps longer, benefited temporarily to be sure by careful treatment to the conjunctivitis to be harassed by an exacerbation of the conjunctivitis on the slightest exposure when upon examination of the nose we find more or less complete nasal obstruction from hypertrophies due, perhaps to septal ridges, spurs or deflection or on examination of the throat a chronic pharyngitis with tonsillar hypertrophy

It is my daily experience, and I am sure it is that of others, to have these cases to deal with, and no permanent relief is obtained until due attention is given to the nose and throat, as well as to the conjunctiva I have in mind a case which is very illustrative of the conditions under discussion A W 18 years of age, consulted me in April 1899 suffering from conjunctivitis, from which he stated he had been a sufferer several times yearly for about four years, and which always returned when he suffered from a cold The conjunctivitis was general, involving both eyes, confined to the bulbar as well as the tarsal conjunctivæ, with decided swelling of the membrane—a perfect picture of acute conjunctivitis On examination of the nose I found complete stenosis of right nostril from turbinal hypertrophy and extreme displacement of septum to right, with marked hypertrophy of lower and middle turbinals and entire mucous membrane of left nostril Upon questioning I found that before receiving a broken nose in a game of football four years previous he had never been troubled with sore eyes Since correcting the nasal defect as completely as possible which I did a month later of the same year, the young man has only suffered one attack of sore eyes (conjunctivitis) which was in March of the present year

I speak of this case especially, because it is one in which the eye trouble dates distinctly from time of injury to the nose, and a practical cessation of attacks of conjunctivitis followed the correction of the injury to nose, and, further, because it is quite evident that the considerably increased blood supply to nose accompanying a cold and the impairment in its free circulation from swelling and mechanical misplacement, precipitated his attacks of conjunctivitis But it is not always true that marked stenosis of the nasal fossæ is necessary in order to excite conjunctival irritation, nor that all nasal stenoses of greater or less degree do excite conjunctivitis We sometimes find apparently insignificant disturbances in the throat and nose closely associated with, if not a causal factor in, conjunctival irritation, i e how frequently when suffering from an apparently mild post-nasal pharyngeal irritation are we annoyed by a similar mild but annoying conjunctivitis? Especially aggravated is this in the morning, after a night's sleep, which latter symptom is undoubtedly due to faulty circulation (more or less sluggishness or impairment in circulation), favored by the horizontal position of the body from the night's sleep Another evidence of this association is the picture, familiar to all seen in hay fever No less is the irritation or inflammation found in the nose than that found in the conjunctiva but it may be said that this is a constitutional condition, affecting both membranous expanses alike, or that it extends, by continuity of membranous tissue, from the nose to the eye, or that it is reflex but it matters not the inseparable association of the two serves to emphasize this subject

But we are more ready to ascribe to septal deflections, inferior turbinal hypertrophies, ordinary colds, hay fever, etc, an association with conjunctivitis than we would be to concede to the middle turbinated body a cause for the production of conjunctivitis, because the middle turbinal is less commonly considered a disturbing factor in the nose, and for this reason I desire to mention a case which I treated for conjunctivitis in

1899 M S aged 24 referred to me by a rhinologist, who had the lady under treatment at that time for hypertrophy of the left middle turbinal which was in intimate contact with the septum She consulted me for the relief of a more or less constant redness and irritation of left eye and to avoid an erroneous conclusion in the mind of the reader, that the operative interference in the nose might possibly be the exciting cause of the eye irritation—let me say that the eye trouble had existed for a long period previous to consulting her rhinologist The suggestion at the time of examination that the conjunctival disturbance might entirely disappear upon the relief of the nasal disorder was fully verified for as the encroachment or pressure of the turbinal against the septum was relieved her eye trouble became less until now for the past year she has had practically no conjunctival irritation whatever—illustrating to me very clearly that it is not necessary to have nasal stenosis or a general hypertrophic condition in the nose in order to produce a conjunctival disturbance but rather as in this case only one comparatively small focus of irritation may excite purely by nerve reflex a very marked disturbance in the conjunctiva

I might go on indefinitely and mention cases to illustrate the purpose of this paper but it is unnecessary Personally I have always been impressed with the importance of the association of diseases of the Schneiderian and conjunctival membranes and when one stops for a moment to consider their intimate anatomical relations which I trust the reader will pardon me for recalling so in detail I am quite certain my reasons for being so impressed will appear well founded and when the ophthalmologist in treating conjunctivitis will constantly bear in mind that he is not treating an isolated tissue but rather one which is by continuity blood and nerve supply inseparably related to other structures—equally and even more exposed to disease—the problem becomes a more simple one and the results of treatment more satisfactory

103 State Street

ROUND LIGAMENT VENTROSUSPENSION OF THE UTERUS

D TOD GILLIAM, M D
COLUMBUS OHIO

ARGUMENT

1 All suspensions of the uterus, of whatever kind, are makeshifts 2 Anchorage of the uterus by means of the round ligaments is the nearest approach to the ideal 3 As a choice between evils the round ligament suspension is superior to all others both from a physiological and utilitarian standpoint 4 The author's method and its advantages

There is not, and never will be an ideal suspension of the uterus in the sense that it meets all the requirements of a mobile organ untrammelled in its functions and held within physiological limits The nearest approximation to this condition as applied to the retroposed organ is found in the shortening of the round ligaments as devised by Alexander, and the nearest approach to an ideal operation for effecting this shortening is the modification of the Alexander operation as devised and practiced by Kellogg But this is not a suspension in the common acceptation of the term—it is rather an anchorage The Kellogg operation, while beautiful safe, efficient, and in the hands of its author, easy of execution, requires skill and training for its execution and will never become popular on account of the difficulty in finding the ligaments It is not applicable to the majority of cases demanding operative interference in that it makes no provision for liberating the adherent uterus Supplemented by abdominal section, whereby the adhesions may be overcome it leaves nothing to be desired The intraperitoneal shortening of the round ligaments by doubling them upon themselves is fundamentally defective in that the slender and weak distal extremity of the ligament is relied on to sustain the uterus, which the stronger ligament in its primitive form was incapable of doing None recognizes this fact better than he who has practiced the Alexander operation and has oftentimes found this part of the ligament not larger than a violin string The Kelly ventrosuspension operation has much in its favor in that it is easy of execution and usually stable in its effects But it is open to the objection of rendering the uterus practically immobile if it is to be of permanent advantage, or failing this the uterus gradually draws away and finally sinks unrestrained into its former abnormal position The Kelly operation, as is now well known, often leads to serious embarrassment in pregnancy and occasionally offers insuperable obstacles to parturition My experience with the operation has been quite extensive and has embraced a period of years I have found it in the main effective in keeping the uterus anteposed and have seen less evil resulting from parturition and pregnancy than is generally credited to it Very recently I found a woman in the hospital on whom I had performed the operation some four years ago, and who in the mean time had borne three children She stated in answer to my queries, that she had experienced no bad effects in her pregnancies or in labor I found on examination the uterus firmly attached to the anterior abdominal wall, and that it was in perfect involution—her babe being five months old—but that she was suffering from one of the most extensive cervical lacerations that I had ever witnessed The Kelly operation is beautifully adapted to the postclimacteric woman and to women who have been rendered sterile by removal of the uterine appendages

The various operations for fixation of the uterus—vaginal and abdominal—are open to the same objections as the Kelly operation, and most of them have fallen into disuse The need of the hour is an operation that will utilize the natural supports of the uterus, that will insure a certain amount of mobility, that will adapt itself to the various functions of the uterus—pregnancy and parturition—and that will be lasting in its results and withal easy of execution We know that the round ligament grows *pari passu* with the development of the uterus in pregnancy, and that it returns to its primitive condition after parturition I have recently had to remove a uterus in the fifth month of pregnancy, and in that case the round ligaments were developed to the size of the little finger and were long enough to be lax with the fundus at the umbilicus We have all seen such things repeatedly, but having the subject in mind at the time I took special note of the condition of the round ligaments in this case Theoretically the same changes should occur in the ligament which had been implanted in the abdominal wall It is but just to say that the idea of implanting the round ligaments in the abdominal wall originated with Ferguson and it was from him that I received my first hint I had

* Read before the American Association of Obstetricians and Gynecologists at Louisville Ky Sept 18, 1900

however, on one occasion previous to this, sutured the round ligament to the peritoneum in the same relative position, but as I was not able to follow the case up I am unable to say with what result There are, however, to my mind some objections to the Ferguson operation in that he cuts the ligament and thus destroys its continuity He also makes two lateral incisions in the deeper structures of the abdominal wall, which have to be sewed up Furthermore, he uses a sound in the uterus to support it while operating

This latter requires a trained assistant and is not devoid of possible injurious effects

STAGES OF OPERATION

The steps of the operation as modified by me are as follows

1 *A median abdominal section* This section is from three to four inches long and at the usual site between the umbilicus and pubis

2 *Break up the adhesions and bring the fundus forward* After which the patient may be placed in the Trendelenburg position

3 *Seize the round ligament on one side and bring it to the opening* The ligament may be picked up between

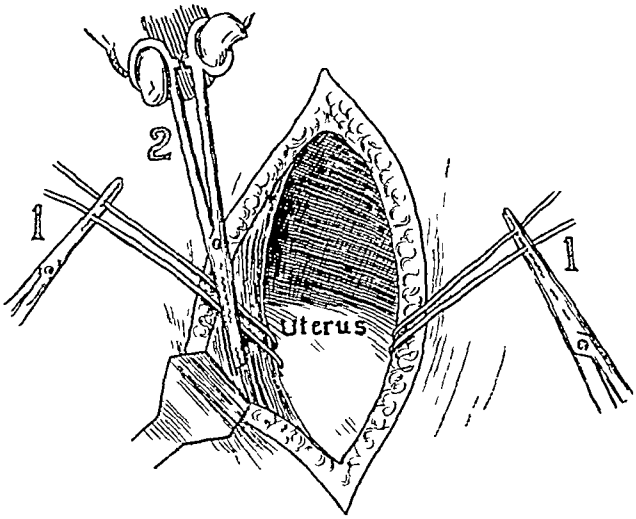

Fig 1 —1 A thread has been thrown around the round ligament on either side and the ends secured by clamp forceps 2 The overlying tissues are retracted and the perforating forceps applied to the surface of the rectus muscle through which it is thrust into the cavity

the thumb and finger, or by the aid of a bullet or blunt forceps At the onset of my work in this line I had forceps specially constructed for the purpose, known as the button forceps but which of late I have practically discarded as being unnecessary

4 *Carry a silk thread under the ligament at a distance of about one and one-half inches from the uterus* This can be most conveniently done with an aneurysm needle, though an ordinary needle answers the purpose very nicely This forms a loop under the ligament, which is not to be tied, but after withdrawing the needle the two ends are brought out of the abdomen and secured in the bite of a snap forceps

5 *The other round ligament is secured in the same way and the ends of the thread brought out of the abdomen and held in the bite of another snap forceps*

6 *Catch up with a tolsellum the fascia muscle and peritoneum at the margin of the incision and an inch or so from the lower angle of the same and make traction* This pins the layers together prevents retraction of the muscle and facilitates the next step

7 *Thrust the perforating forceps* (specially devised for the purpose) *through into the peritoneal cavity and seize the thread which holds the round ligament* The perforation is made slantingly, the forceps entering the fascia one-half inch from the edge and emerging on the peritoneal surface from one-half to three-fourths of an inch farther from the edge The handle of the forceps is next tilted outward, which everts the lip of the incision and brings into view that end of the forceps which is in the cavity The jaws are opened and the thread placed between them

8 *Remove the clamp forceps from the thread and withdraw the perforating forceps* This brings with it the thread and the thread in turn brings the ligament through the perforated wound in the abdominal wall

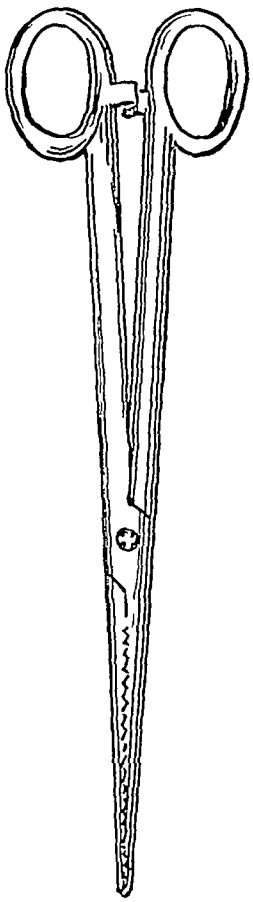

Fig 2 —Perforating forceps

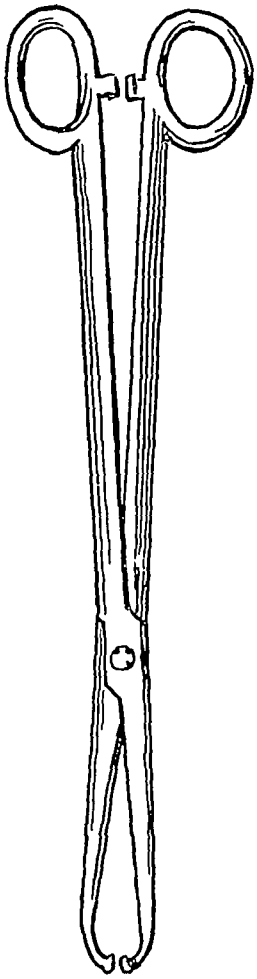

Fig 3 —Button forceps

9 *While the ligament is held taut fasten it into the wound* This is done by a catgut suture which is passed through its base including the tissues on either side then back again where it is tied The thread which held the ligament is cut close to the ligament on one side and withdrawn This to prevent infection by pulling through the ligament that portion of the thread which had been exposed

10 *Treat the opposite side in the same manner and close the median abdominal incision* The projecting free ends of the ligaments are gathered up en route by the running catgut suture which closes the fascia and drawn to the middle line

A defect in my operation as originally devised was in gathering up all the slack of the distal extremity of the ligament This in some cases gave rise to a tensive drawing feeling that was quite uncomfortable I now merely

take up a small loop of the ligament, or just sufficient to project above the surface of the rectus muscle Formerly I had rather an elaborate technique in the way of suturing the ligament so that it might not retract into the abdomen Experience has taught me that such precaution is unnecessary I now merely pass a catgut suture through the ligament in one direction and back in the other and tie the two ends I have recently had to curette a case on which I had performed the operation in the early part of May last, and in doing so drew down the uterus so that the cervix protruded from the vulva On removing the forceps the uterus crawled back into the pelvis and in a few moments had resumed its normal position As to the possibility of incarceration of the bowel between the uterus, round ligament, and anterior abdominal wall I regard the chances as exceedingly remote Strangulation I regard as utterly impossible In a demonstration of the operation before the members of the Ohio Medical Society, in May last, I passed the four fingers of my right hand into this opening after completing the operation In a recent contribution by

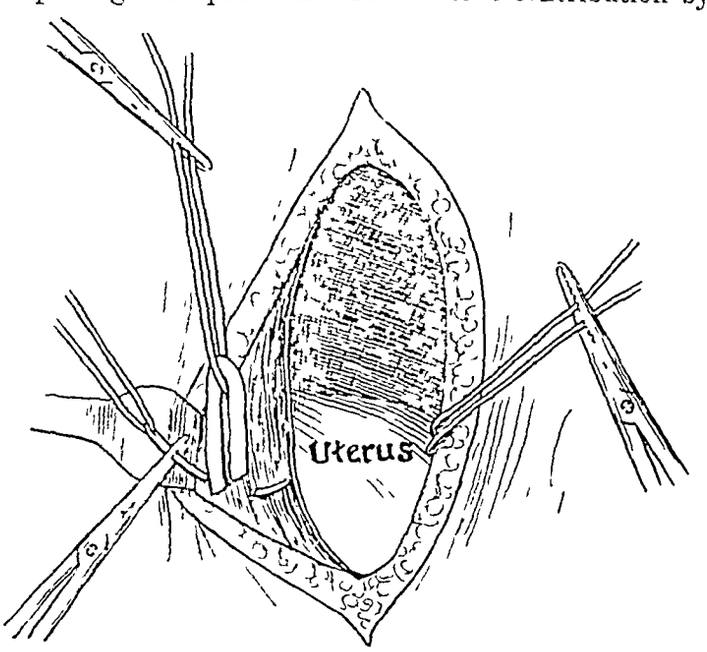

Fig 4 —The perforating forceps is withdrawn, bringing after it the round ligament through the base of which a suture is being passed

M Richelot, he recommends that the round ligaments be drawn up over the fundus and stitched into the lower angle of the abdominal incision Here I should fear strangulation, as the space between the uterus and ligaments is so limited That the bowel may insinuate itself in front of the uterus is a fact well attested, although it must be admitted that such an occurrence is very rare under normal conditions In one case of my own the operation of ventrosuspension was followed by obstinate constipation and distress in the hypogastrium with gaseous distension of the bowels Suspecting that some coils of intestine had found their way between the uterus and abdominal wall I directed the patient to assume the knee-chest position, which relieved the condition

In conclusion, I wish to say that the careless and unclean operator will almost assuredly be disappointed in this operation, as suppuration is prone unless the most scrupulous aseptic detail be adhered to Not only should there be a careful preliminary cleansing of the parts, but there should be frequent ablution of the hands during the operation, and it should be the aim of the operator to handle the parts as little as possible and to complete the operation as expeditiously as consistent with good work I desire to say, furthermore, that increased experience with the operation confirms all my preconceived notions as to its value and adds to my desire that it should be more generally known and practiced

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MAGNETIC FOREIGN BODIES IN THE EYE

E VILLIERS APPLEBY, M D
Clinical Instructor of Ophthalmology, University of Minnesota
Member of the Berlin Ophthalmological Society
ST PAUL, MINN

The class of patients with whom we have to deal in our subject may be said to belong for the most part to laborers or mechanics, whose daily occupation requires that they strike steel upon steel or steel upon iron as the case may be

We may speak of steel or iron interchangeably Either causes deflection of the magnetic needle, each can be located by means of the Rontgen rays, both are attracted by the magnet, and the one is as destructive as the other

Small particles of iron or steel are occasionally found loose in the conjunctival sac When seen there they have usually first struck and probably loosely imbedded themselves in the cornea or bulbar conjunctiva and afterward become dislodged They are then principally found just under and a little above the margin of the upper lid and are naturally easily removed

Small chips of iron or steel are frequently found imbedded in the cornea—they then cause considerable pain, lachrimation and photophobia If located in the horizontal meridian or a little below it the degree of pain may be lessened by the patient's constant effort to limit the act of nictation thus keeping the eye open as much as possible thereby diminishing the amount of irritation caused when the lids are in contact with the foreign substance Such particles of iron may be overlooked by the patient or his friends If left alone they rust and cause more or less infiltration and frequently are the seat of infection We are enabled to detect them in good daylight or by means of focal illumination —still more definitely by the use of a corneal magnifier If loosely imbedded, we may use a probe around which is wrapped a piece of absorbent cotton, moistening it and wiping the foreign body off If firmly imbedded, the cornea should be anesthetized either with cocain or holocain, the eye steadied with the fingers and under good illumination the foreign body removed with a spud or gouge made for that purpose Or we may loosen the particle and apply a strong magnet If rust is present it is well to remove as much of it as possible

If the foreign body is deeply located in the tissues of the cornea, we should, if necessary, cut the overlying portion with a small cataract knife and then apply a strong electromagnet In this way we lessen the possibility of further injury to the cornea or of having a sharp piece of iron penetrate into the anterior chamber during the process of removal

The importance of strict asepsis in all cases can not be over-estimated If infection is already present, we should use an antiseptic and then irrigate with an aseptic or mildly antiseptic solution If much irritation is present instill atropin and apply a pressure bandage

Small sharp pieces of iron are occasionally found imbedded in the sclera Owing to its elasticity and density, it, in many cases, resists the impelling force of the foreign body sufficiently to prevent penetration, or on the contrary it is entirely penetrated by it It is

as a rule easy to locate and remove these pieces of iron from the sclera

Before considering the more complicated subject of injuries due to penetration by, and retention of, the magnetic body, we will speak of the history and diagnosis of such cases The patient perchance, tells us that he has been working with hammer and chisel, and that upon striking a blow something hit him in the eye Occasionally bystanders are the recipients of small pieces of steel in the eye Many times patients try to assure us that nothing has penetrated the globe They complain often of having only comparatively slight pain of photophobia, lacrimation together with more or less diminution of vision We may find only a linear scar, the edges of which are already in apposition

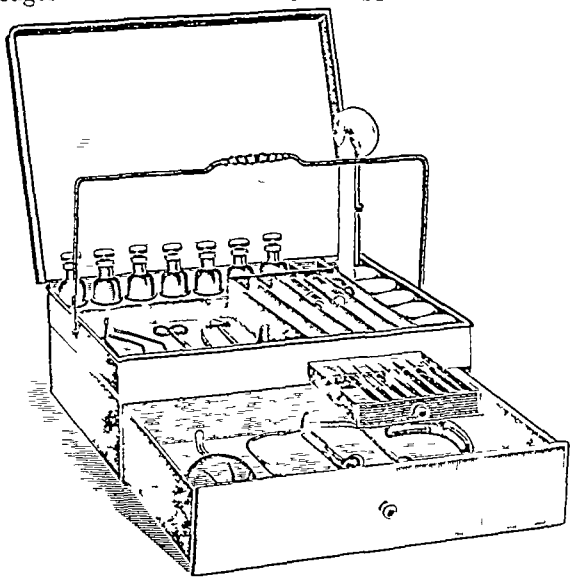

Figure 1

After examining the eye well in good daylight, we determine approximately the amount of visual acuity —field of vision—then examine under focal illumination and with the ophthalmoscope Next in order is the sideroscopic examination The value of the sideroscope in determining the presence of iron in the eye, and too its approximate location, is much underrated Dr Thomas Pooly of New York was the first to use the compass needle in determining the presence of iron in the eye All sideroscopes have been modifications of

NOTE —It has been noticed when too late to change that the accompanying cuts belong to a different article Dr Appleby's cuts were mislaid and the error was not detected until too late to make correction

his In 1894 Asmus devised one which has been successfully used up to the present time, but as it is somewhat complicated in construction it requires the services of a good assistant for its successful employment I have seen Professor Hirschberg get brilliant results with this instrument of Asmus's, and two years ago it was my pleasure to see him demonstrate, before the Berlin Ophthalmological Society, a sideroscope designed by himself Its mechanism is simple and it gives excellent results In structure it consists of wood, brass and glass There are two substantial wooden brackets which should be firmly attached to a solid wall running north and south, or nearly so Upon the upper bracket is an adjustable upright standard, the upper part of which consists of a glass tube In the middle of the standard is an oblong chamber of brass on each end of which is fastened a small glass capsule In the upright tube is a fine brass thread attached above to a revolving screw On the end of the thread hangs a magnetic needle, upon the middle of which is fixed a small mirror Upon the lower bracket swings a standard, bearing a lamp, rays from which pass through a strong lens on to the mirror of the swinging needle A graduated scale is placed in position and the lamp so adjusted that the reflected rays fall upon a graduated screen

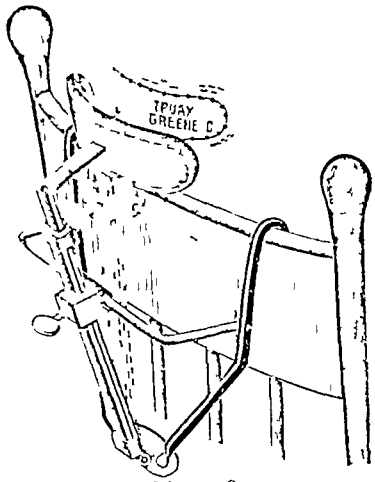

Figure 3

For convenience of expression we may divide the eye vertically and horizontally thus giving us four quadrants, an upper and lower nasal and an upper and lower temporal quadrant Cut No 1 shows the glass rod—within which is balanced a magnetic needle—as being almost in contact with the eye at about the juncture of the lower and middle third of its lower nasal quadrant, 7 mm from the sclerocorneal junction Here we find the needle gives the greatest reaction which,

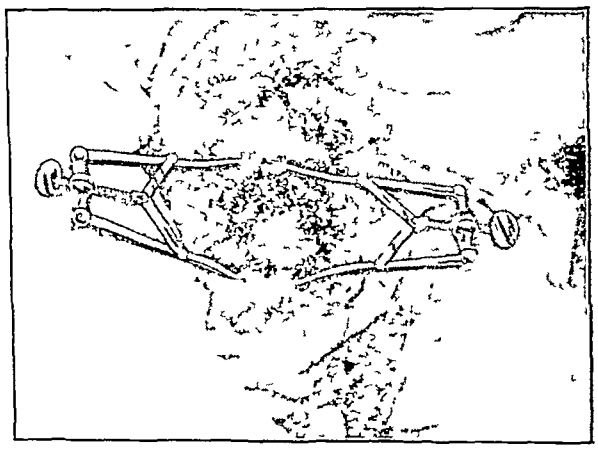

Figure 4

as the indicator shows upon the screen, measures 4 degrees If we get little or no reaction of the needle when applied to an eye in which we have good reason to believe iron is present, we should bring the patient's eye into the field of a strong electromagnet This magnetizes the retained iron and consequently results in its giving a better reaction when the eye is again brought into the field of the needle

In no case should we undertake an extraction nor should we even cause dislodgment of a chip of iron until we have if possible determined its location and relative size In order to do so it will frequently be necessary to utilize the Rontgen rays The first foreign

body removed successfully after location with Rontgen rays was reported by Williams[1] De Schweinitz, Hansell, Sweet, Oliver, Percy, Friedenberg and others have since reported favorable cases

In order to obtain good results in x-ray work,[2] the head and eye of the patient must be kept motionless during exposure This is best accomplished by having the patient lie upon a table designed for that purpose The eye should be kept closed Knowing that the rays travel in straight lines, we endeavor to place the tube and plate in such a position that we get a bitemporal skiagraph and also one taken in a fronto-occipital direction

Before making an exposure in the bitemporal direction, four pieces of fuse wire, each 6 mm in length, are placed—and held in position by means of ordinary court-plaster—over the temporal region of the eye so that the enclosure represented between their inner ends corresponds to an area a little larger than that corresponding to the lateral area of the eye These pieces of fuse wire show distinctly on the plate after development

If there be upon the plate more than the four regular outlines of the wire, we know we have a foreign body, and, moreover, we know its approximate size, location and shape as seen from this direction We may still better locate it by placing a piece of paper cut exactly

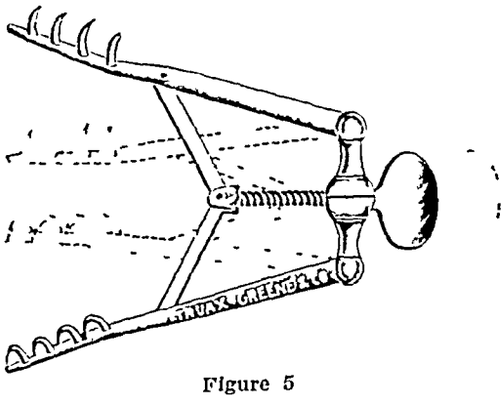

Figure 5

the size of the normal eye upon the plate between the four artificial landmarks, and mark upon it the location of the foreign body Then, in turn, we place the paper over the area between the landmarks upon the patient, then designate the location of the foreign body by means of an aniline pencil

In the anteroposterior exposure two pieces of wire may be used They are placed, one upon the upper the other upon the lower lid in such a manner as to represent the diameter of the eye from above downward Comparisons are in like manner made here as before

We now come to the subject of the extraction of the magnetic body The use of the magnet in surgery of the eye was first recorded about 250 years ago, when Wm Fabry, a German, removed a small piece of iron from the cornea by means of a lodestone (1656) It is a little over half a century (1842) since Meyer, also a German, removed, through the wound of the sclera, a piece of iron from the vitreous, using a thirty-pound magnet About a quarter of a century later McKeown, of Belfast, made the first recorded equatorial incision (1874) for the removal of a piece of iron from the vitreous, which he accomplished by means of a magnetized rod of iron—the so-called permanent magnet In 1877 Hirschberg perfected his electromagnet, and two years later operated successfully with it on a difficult case, making the first recorded meridional incision

1 Trans of Am Ophthal Soc, vol ii, p 708

2 I am much indebted to Dr Harold Sneve for aiding me in my efforts to obtain good radiographs

In 1894 Haab, of Zurich, constructed a giant magnet on the principles of the one used by Meyer in 1842 So many good descriptions of the magnet have been published that I shall here say but little regarding its structure It consists of a cylinder of soft iron, around which is wound many layers of insulated copper wire There is a cut-off switch fastened to the wall, also a resistance box at its base, with a number of steps which allow the gradual admission of the current, thus enabling an assistant to regulate the amount of force required by the operator Meyrowitz has mounted the Haab magnet so that it may easily be moved in practically any direction

I find that when in the recumbent position, the patient is often under much better control This applies particularly to those cases in which the amount of traumatism is great

The Hirschberg magnet consists of a soft bar of iron around which is wound a coil of fine insulated wire It is a hand magnet provided with a number of variously shaped points of different sizes It can be connected to a series of dry cells or to a zinc carbon element, and will support as high as 500 grams It should be used in conjunction with the Haab What the one will not accomplish, the other, in a large majority of cases, will

Knowing the position of a foreign body lodged in the interior of the eye, we elect as to whether we shall remove it through the tract of entrance, draw it by means of a large magnet into the anterior chamber and afterward through a corneal section, remove it with the small point of the Hirschberg magnet, or we may decide that a meridional or an equatorial incision is preferable In each instance it is our aim to remove the iron by such a method that it will result in the least injury to the eye

The Haab magnet is and has been much used as an important factor in diagnosis When used for that purpose the head of the patient is brought gradually toward the pole of the magnet If pain be then present or increased we know that the foreign body has impinged upon the tissues, finally, if after we have turned on the full force of the current, we get no pain nor increase of pain, we reverse the current and apply the magnet to the eye so that its power-lines shall have had effect from all directions, and then if the patient complains of no pain, we infer either that there is no magnetic body present or else that it is too firmly imbedded to be affected by the magnet

The magnet as a diagnostic instrument should be applied only after all other means have failed to show the presence of iron or steel in the eye It is of the greatest importance that the patient be seen as soon after the injury as possible

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VARIABILITY OF THE TUBERCLE BACILLUS

CARL RAMUS, M D

ASSISTANT SURGEON U S MARINE HOSPITAL SERVICE

FORT STANTON, N M

The variability shown by tubercle bacilli in their staining reactions and morphology has been made the subject of much study for more than a year at Fort Stanton, N M Facts have been observed which, so far as we have been able to ascertain have not as yet been described in the literature of tuberculosis or at most vaguely alluded to, and which we believe have importance in establishing early and correct diagnosis, as well as in other stages of the disease

Our purpose now is to demonstrate the important fact that tubercle bacilli from different subjects, and from the same subject at different times, undergo changes in their affinities for certain dyes, to the extent, at times, of rejecting one or several while displaying avidity for others

This phenomenon has been observed and studied by P A Surg Cobb for several years past to as great an extent as official duties allowed, but not until detailed at Fort Stanton was it possible for him to give the matter the attention it deserved Since then the results of our experiments have not only confirmed his earlier tests but also brought out some new facts hitherto unobserved In this connection the reader is referred to Cobb's article in the "Annual Report of the Marine-Hospital Service" for 1898

The text-books all seem to unite in stating that tubercle bacilli are best stained and demonstrated by fuchsin solutions, given solutions properly made up, of course, and sufficient experience and manual skill on the part of the operator in destaining and counterstaining Now, in view of the fact that there are several preparations in the market designated as fuchsin, as well as modifications of the same substance under the names of magenta rosanilin solferino, etc —all classed under the head of fuchsin—it is evident that the books are not at all clear as to what preparation is referred to as fuchsin Generally little or no mention is made of the fact that several other dyes than fuchsin are able to stain tubercle bacilli equally well, or if alluded to at all the impression is usually conveyed that they require many hours in time, and the employment of aniline oil as a mordant, which of course renders solutions so unstable as to be worthless in a short time The different preparations of fuchsin, and the varieties known as magenta and rosanilin possess markedly different physical properties very easily observed, as varying solubility in alcohol, water and other liquids, staining of tubercle bacilli and other micro-organisms, etc Grubler's fuchsin (S) is quite soluble in water sparingly so in alcohol, gives no metallic luster in solution, and rarely is able to stain tubercle bacilli Merck's fuchsin (anilin-red) is the entire reverse of Grubler's, but the latter's preparation of magentaroth seems physically identical with it Of course, bacteriologists are aware of the different uses of the fuchsin preparations and varieties, but general practitioners are not always so, and often make the error of employing acid fuchsin (fuchsin S) in sputum examinations, which rarely stains tubercle bacilli, being intended for other purposes This mistake is not to be wondered at, seeing that the instructions in the books are not sufficiently definite on this point Grubler's Sudan III seems to be a most reliable stain for tubercle bacilli, while Merck's is said to be worthless for that purpose[1] We have also noticed differences in efficiency in bottles of certain dyes from the same maker, especially so with methylene-blue, gentian-violet, fuchsin and safranin Up to the present time we have had best results from Grubler's Sudan III, magentaroth, Merck's fuchsin, and Merck's methyl-violet Malachite-green (Merck's) has worked beautifully in several cases, but our experience with it is only recent Regarding mordants, we prefer carbolic acid to anilin oil, and use it with all stains except Sudan III which does not require a mordant As remarked before, anilin oil makes solutions very unstable, while those containing carbolic acid last much longer, excepting rosanilin which does not seem particularly valuable To avoid complexity it is best to make all the formulas relatively identical, that is, where their physical properties permit Thus the solution in which the different dyes are dissolved may consist of 5 per cent carbolic acid in 25 per cent alcohol From 1 to 2 per cent of any dye may be added and the solution is complete, though saturated solutions would be as good or better, but in the case of very soluble dyes the mixtures would be too expensive Sudan III is an exceptional stain both in composition and principle, and for staining tubercle bacilli all that is necessary is to use a saturated solution in absolute alcohol Except in rare instances any of these stains should do its work within two minutes either hot or cold Sudan III when dissolved in turpentine will also stain tubercle bacilli The same destaining fluid, consisting of HNO_3 or HCl, alcohol, or H_2SO_4 25 per cent, or sweet spirits of niter, can be used for all stains except Sudan III, which only requires plain alcohol

The method employed in this laboratory in preparing the specimen for staining is one known as the Berlin method Cobb improved this method, and as it is far superior to that in general use it will be described

A portion of the sputum is removed with a wire hook, not necessarily of platinum, and transferred to a clean slide held between the thumb and index finger of the left hand A second slide is now taken in the right hand, held in like manner, and pressed down upon the sputum on the first slide, and they are then drawn apart and pressed together alternately until a spread of uniform distribution is effected on the apposed surfaces of both slides, with the exception of a space one-half to three-quarters of an inch from each proximal end where the slides are grasped by the thumbs and fingers The slides are then dried and fixed in the usual manner, and are ready for staining When ready for examination, a drop of oil of cedar or glycerin is placed directly on the spread and the oil-immersion lens brought in contact with it As this method dispenses with cover glasses its advantages are obvious Cover glasses are objectionable, owing to their small size brittleness liability to cut and infect the fingers of the operator, and the general nastiness of the cover glass method The improved Berlin method prevents error in demonstrating the staining qualities of any stains employed, as both spreads are prepared in the same manner and should contain the same relative number of bacilli The demonstration of variability is also well shown here when one spread is beautifully stained by one method, and the other spread, when some other stain is used, often gives negative results Glycerin is to be preferred to oil of cedar for oil-immersion work not intended to be permanent, as slides thus used are much easier to clean But it should be clearly understood that even with glycerin it is not easy to rid slides of stained tubercle bacilli It seems incredible that these germs can preserve their form and staining properties as they do in the presence of heat and alkalies, but we have often detected fairly well stained tubercle bacilli on slides boiled one-half hour in solutions of caustic potash About the most reliable cleaning reagent we have employed is concentrated lye in strong solution, in which the old slides should be boiled at least one hour Before proceeding with the subject of variability it may be of interest to note that tubercle bacilli can often be stained in absolute alcoholic solutions of several dyes to which pure carbolic acid is added This is only mentioned because the books

[1] Rosenberger in the Journal of Applied Microscopy June 1900

lead one to believe that the presence of water is essential

In a small percentage of cases the bacilli are found to possess so little affinity for any stain that even very dilute acid destains them almost instantly and only by the most delicate manipulation can they be demonstrated In a few exceptional cases no tubercle bacilli can yet be shown by any method, though the patients present undoubted physical signs and symptoms of tuberculosis Such cases, however, as well as the preceding ones, usually contain bodies of irregular conformation resembling bacilli and showing some affinity for the primary stains These bodies may possibly be involution forms of tubercle bacilli In a few cases experimented with who have lesions other than pulmonary, such as tubercular tonsil and lupus vulgaris the bacilli seemed to indicate a preference for Grubler's fuchsin (S) —the poorest stain for sputum Only a few pulmonary cases here can be made to show tubercle bacilli with Grubler's fuchsin (S) but these also stain with other colors A very curious fact noted in several patients immediately upon their arrival was the impossibility of making their bacilli retain any stain by a quick method, though specimens exposed to the stain 18-24 hours were beautifully stained This condition was not permanent, however and in the course of a few days the bacilli would stain in the usual way Differences in size of the individual bacilli are often observed, and as a rule seem to depend on the length of time the disease has been present, the older cases showing bacilli of nearly uniform size and few in number, while recent cases are apt to exhibit considerable variety in this respect, the sputum being loaded with bacilli, some so large as to inspire doubt as to their identity with the Koch bacillus, even though staining similarly and having the same granular structure The so-called branching form of tubercle bacillus is occasionally met with in acute cases, though its occurrence is comparatively rare and its special significance if any, is unknown

In order to explain the fact that tubercle bacilli could not be demonstrated at all times in sputum from any subject it has been frequently claimed—by observers who apparently employ only one primary stain—that the bacilli in question are absent at such times, and, presumably, only appear in sputum coincident with acute exacerbations in which active tissue destruction is going on We must take exception to this statement or inference since making use of a variety of staining methods, confidently believing that in no well marked case in which tubercle bacilli have once been demonstrated are they ever absent from the sputum, though often rejecting one or other stain temporarily This belief receives additional emphasis from the fact that introduction of sputum from such cases supposed to be free from tubercle bacilli into the peritoneal cavities of guinea pigs usually produce the lesions of tuberculosis and subsequent death

Of course, sputum is more appropriate for demonstration of a large number of tubercle bacilli when raised in the early morning than during the rest of the day, but that fact can be readily explained on purely physical reasons During the night, if the patient sleeps well, the pulmonary sputum accumulates and as its water is transformed into vapor and removed with the breath, it becomes quite dense, and naturally contains many more bacilli than at other times

It is often astounding when, after negative or doubtful results with one stain the specimen is tried with another or several others, and is then seen loaded with typical tubercle bacilli On one occasion bacilli in the sputum of a certain patient could only be made to retain gentian-violet, but several days later the phenomenon was reversed, methylene-blue being held with avidity, while the former dye was so imperfectly retained that a diagnosis would have been impossible by its agency alone Many other instances of variability have been encountered, and the importance of such in practical diagnosis must surely be considerable

For quickly staining tubercle bacilli in tissue sections the following method is convenient Place the section on the slide, and when the alcohol has evaporated apply a drop of a weak solution of egg albumin and gelatin, dry in air fix with heat, and stain same as sputum spreads, except that heat should not be applied and staining and destaining ought to have about double the time

THEORIES OF VARIABILITY

In view of the natural doubt likely to arise as to the bacilli which exhibit such remarkable variability being genuine tubercle bacilli, it may be well to enumerate the several other species of bacteria which, according to the text-books, possess the power to retain certain anilin dyes in the presence of dilute mineral acid They are the following 1 Lepra bacillus 2 Smegma bacillus 3 Acid-resisting bacteria in butter 4 Bacillus of syphilis (Lustgarten) 5 Timothy-hay bacillus

It is exceedingly improbable that any of these bacilli can be responsible for the peculiar variability toward stains so often noticed in connection with our patients when staining for tubercle bacilli The bacillus of leprosy is out of the question, of course The smegma bacillus can also be eliminated from further consideration in the large majority of cases, for obvious reasons The acid-resisting bacteria found in butter might perhaps be present now and then in the mouth shortly after a meal, but they would not likely occur in large numbers in deep pulmonary sputum, and even if they did they would shortly appear as colonies on glycerin agar plates inoculated from the sputum A number of such tests failed to develop bacilli of that character, and examination of oral secretion from several healthy persons did not reveal bacilli capable of holding anilin dyes in presence of acid

Lustgarten's bacillus of syphilis has always occupied a precarious position, which has become more so since the recent work of Van Niesen has been described The discovery of the smegma bacillus nearly proved its death blow, but it managed to partially outlive that event, probably because of Lustgarten's claim that his bacillus had also been obtained from the central portions of gummata Providing it is really an independent organism, it is probable it would stain as the tubercle bacillus usually does, and possibly this germ does figure to some extent in tubercle cases where the syphilitic infection is comparatively recent, but as at present there is no differential test, and as syphilitic consumptives are decidedly in the minority any way Lustgarten's bacillus can not be considered a very formidable antagonist to the tubercle bacillus when it comes to a demonstration of acid-resisting germs in sputum from a patient having physical signs of tuberculosis

Regarding the timothy-hay bacillus nothing definite can as yet be said, but considering its habitat, and as a result its association with stables, corrals, etc, its relation and possible identity with the acid-resisting germs in butter becomes a matter of interesting speculation

The alleged saprophytic form of tubercle bacillus described by Ferran should be briefly mentioned He asserts that spermin is produced in the cultures, but as we have not yet been able to obtain his full report as to the staining properties and pathogenesis of this variety nothing further can be said about it here

Scratches on the surfaces of slides will frequently confuse and mislead a beginner, and their frequent occurrence on slides that have been used several times should always be remembered They hold the primary stains in presence of dilute acid and after moderate boiling, and often closely resemble bacilli but generally they can be recognized without difficulty if the following points are borne in mind

1 Several usually occur in series, resembling minute arcs of a circle

2 All members of the series have about the same degree of curvature

3 Their extremities are generally pointed

4 A granular appearance is not usual

5 They stain deeper than tubercle bacilli and have greater power of refraction

The subject of scratches on the surfaces of glass slides is mentioned here because of the fact that errors in diagnosis are known to have been made from this source

THE PHYSICS OF VARIABILITY

It can be taken for granted, in view of Koch's and Klebs' experiments, that the only reason tubercle bacilli are able to resist the destaining action of acids is because of the large amount of fat they contain—about 22 per cent Possibly and very probably the physical condition directly responsible for the apparent absence or great scarcity of tubercle bacilli in the few cases where we were not able to make satisfactory demonstrations while undoubted physical signs of the disease were present is a relatively small percentage of fat in the individual bacillus Klebs asserts that when tubercle bacilli are exposed to the action of strong alkalies for some time they lose their power of retaining stains against acids and thereafter act like most ordinary bacilli toward stains and destains While the fat hypothesis may hold good for the cases just mentioned it cannot explain the variable affinity of genuine tubercle bacilli for different anilin dyes whose principle of action is apparently the same In these cases it would seem that some essential modification in the fat or stroma or capsule is brought about varying in nature and extent, so that at one time a certain stain or set of stains has a greater chemical affinity for the modified bacterial substance than at another We have often noted that a specimen in which no typical bacilli could be demonstrated nevertheless contained granular bodies which held the primary stain Klebs states that these are disintegrated tubercle bacilli We were usually able to demonstrate typical bacilli in such cases at a later period Sputum is, as a rule, strongly alkaline, and that fact may have some importance in the cases recently alluded to where the bacilli can only be found with difficulty or not at all the hypothesis of saponification to a greater or lesser extent being then tenable But the amount of alkalinity alone could not explain, for instance, why gentian-violet is preferred to methylene-blue at times, or the reverse The peculiar sweetish taste so common in the sputum of tubercle subjects may perhaps indicate the presence of one or more substances having special mordant or destaining properties for certain stains So far as we are aware previous chemical experiments to isolate this sweet substance, or substances have resulted negatively Tuberculous sputum does not give the Ehrlich diazo-reaction, fresh or boiled, acid or alkaline, only showing a deep yellow ring when the ammonia is added, and not the intense red one frequently seen in the urine In our experience this reaction is most marked in the urine of cases where the disease is actively progressing and constitutional symptoms are quite severe The output of urea is increased in this altitude

Whatever the chemistry involved, it is probable that the phenomenon of variability is ultimately the result of one of two factors, or a combination of both, namely 1 The production of a specific antitoxin 2 The presence of extensive mixed infection

That a specific antitoxin is produced in tuberculosis as in other infectious diseases there can be no reasonable doubt, and that being admitted it seems certain its presence must affect the vitality of the bacilli more or less The changes thus brought about may have for their visible manifestation the capricious staining reactions so much discussed here, in which case the variations exhibited would indicate the different stages of vitality possessed by the bacilli, some stains having affinity for strong organisms and others for debilitated ones Speculation along these lines naturally brings in the subject of immunity at the same time, and certain aspects of it are nowhere better exemplified than in the clinical observation of a number of tuberculous patients Take, for instance, individual or relative power of resistence to the action of toxins produced by tubercle bacilli Some patients, presenting physical signs of extensive tissue destruction in both lungs, will live on for a long time without becoming markedly worse The turning point on the downward arc is passed, and then, slowly but surely progress towards recovery is made In those of this class who do not recover the necropsies frequently reveal the fact that death was more the result of gradual suppression of functional activity than of intoxication On the other hand, some patients, having a comparatively small amount of tissue involved, will show a marked susceptibility to the toxic action resulting, rapidly growing worse in every way and shortly succumbing to the disease The necropsies usually confirm the physical findings in life, showing that only a small portion of pulmonary tissue was functionally inactive, and consequently that death was the result of intoxication and not loss of function Of course, in such cases, mixed infection probably plays a more important role than generally given credit for

The relation of mixed infection to the variable staining properties of tubercle bacilli and to the clinical phases of the disease is, we have reason to believe a subject worth much time and study though somewhat neglected since the first rush of cultivation experiments following Koch's memorable discovery We have recently given some attention to it in a superficial way But the whole subject ought to be gone over again thoroughly Streptococci are usually spoken of as being of most importance in mixed infection though in our experience staphylococci are much more in evidence However that may be, the fact remains that in the matter of vitality streptococci have the advantage, our cultivation tests having demonstrated their ability to survive exposure to carbolic acid 5 per cent, and bichlorid of mercury 1 1000, about as long as tubercle bacilli The idea may be reasonably entertained that the chemical product of other organisms, present in large numbers in tubercle sputum may be in part, at least the cause of the staining variations shown by tubercle bacilli Ina-

bility to stain readily, or erratic manifestations in that direction, probably indicate lowered vitality of the bacilli There are a number of facts which show that some microorganisms (the products of their vital action) are inimical to the growth and life of others It will be interesting to note the effects produced on tubercle bacilli—from the staining point of view—when other germs are grown along with them, also the action of blood serum of appropriate animals immunized to tuberculin and the far more powerful toxins recently extracted from tubercle bacilli

In this connection the clinical relation of other diseases to tuberculosis, when coincident with it, should receive brief mention There is evidence showing that in several tubercle cases attacks of smallpox apparently eliminated the former disease The clinical observations of Portucalis on the relation of syphilis to tuberculosis are interesting, and his conclusions will be quoted verbatim

"(1) Syphilis, when it is contracted by a phthisical patient, arrests the course of the earlier disease (2) When contracted by a patient already suffering from phthisis, syphilis runs a mild course (3) The antagonism between the microbes of these two diseases produces a neutralization of their toxins (4) When the microbe of syphilis has been discovered, and its cultivation made possible, we shall be able to prepare a serum with which consumptives may be inoculated and their disease arrested (5) Inoculation with the blood serum of syphilitics in the third stage would be of great advantage to consumptives"—*Med Rec* Sept 8, 1900

From the results as noted in the foregoing it seems logical to advance the following

CONCLUSIONS

1 Tubercle bacilli are not always so easy to demonstrate as is commonly believed, even though present in large numbers

2 The fuchsin solutions like those of other dyes, can not at all times be absolutely depended upon

3 Tubercle bacilli from different patients, and from the same patient at different times, will not invariably stain by one method

4 The bacilli exhibiting these varying staining properties are genuine tubercle bacilli, and not other species of acid-resisting germs

5 The staining variations probably depend on physical and chemical changes in the bacterial substance, instituted either by antitoxic action or by the products of associated organisms, or by a combination of both

6 In the absence of demonstrable tubercle bacilli, where physical signs of tuberculosis exist, a prompt diagnosis of that disease should be confidently made in the interest of the patient, and no valuable time be lost in waiting for typical bacilli to appear

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MEDICAL COLLEGES AND PROFESSIONAL STANDARDS

INEZ C PHILBRICK, A M, M D
LINCOLN, NEB

According to the report of the United States Commissioner of Education, in 1899, there were in that year 23,778 medical students and 4911 medical graduates Between 1875 and 1899 the increase in the number of medical students was 177 per cent But not alone upon statistics do we depend for confirmation of the crowded state of the profession The fact is so patent and alive that much of the editorial space of leading medical journals is devoted to a discussion of the condition, its cause and its cure

That a majority of the profession is incompetent and unworthy, is not subject to statistical proof To the unprejudiced medical observer of the profession of almost any locality, the truth is patent that very many of its members are persons of inferior ability, questionable character and coarse and common fiber The little esteem in which the profession is held by laity and government attests its unworthiness Patients whose number is legion throw themselves from its arms into the embrace of quackery, and we must admit that the support is often as effective in the one case as in the other "Christian Science," mental healing magnetic healing, and osteopathy reap a rich harvest from the incompetency of regular practitioners Granted that the wisest and most conscientious often stumble, to any one possessed of medical skill witnessing the mistaken diagnoses, inefficient and ofttimes barbarous, treatment, and the unconscionable fleecing of a credulous public by members of the profession, is borne in the conviction that, like the traveler on the Jericho road, he has fallen among thieves The public can not discriminate In its view there is no comparison of a degree which, qualitatively considered, varies as between mud and mind The influence of the profession is not felt in the conduct of government Bills championed by its foremost members are pigeon-holed in the committee room Just bills for compensation for medical services rendered to the public are not allowed, while those licensing quackery make triumphant passage from the first reading to the governor's signature The opinion upon matters medical of the ignorant member from X outweighs that of the highest in the profession Why? Because the profession does not conform to that short rule of Dr Holmes' for acquiring the confidence and esteem of the public—to deserve it Unquestionably the cause of professional degeneracy lies in the educational requirements made for entrance to the profession, and hence the question resolves itself into one of medical colleges, their number, their location and their standards The educational aspect of medicine is seldom discussed in our societies Are we dwellers in houses of glass and hence wary of stone-throwing? In defense of the highest, it is well if all our houses of glass be shattered that we must build more enduring

Medical colleges exist far in excess of any public need Like the country store which doles out its inferior wares at every cross-roads, a so-called medical college is found in almost every town of generous size, and to obtain a medical degree is within the possibility, intellectual and financial, of any youth, however lacking in mental and moral fitness In inverse ratio to the frequency of medical colleges do we find the extent of their equipment In the majority of cases they possess few facilities for demonstration, are located in towns where there is not a sufficient number of dependents to furnish requisite clinical material, and generally have as instructors men of mediocre or less ability The same law that holds in trade, to-wit, that the best interests of the consumer are served by bringing him as near as possible to the center of distribution, obtains as regards medical instruction The report of the United States Commissioner of Education for 1899 notes 151 medical colleges the recent estimate of the Secretary of the AMERICAN MEDICAL ASSOCIATION is 173 No doubt the latter figure is more nearly correct As an institution of local ill-fame and more than average depravity is not noted in the list it is probable that other choice institutions throughout the land do not appear in this report The total number of medical colleges in Austria and Germany, with a population greater than in the United

States was in 1898, twenty-nine In the same year, Great Britain with a population more than half ours, had seventeen The editor of the *Medical Record*, commenting upon the discrepancy, while admitting the greater need of America by virtue of its less dense population, adds "But we do contend that when a city the size of St Louis has as many medical schools as Russia, the craze for multiplying these schools is being carried to absurd and harmful lengths" As regards the establishment of medical schools there seems to be but one governing idea, that they may have life, considered in a purely quantitative sense, and have it more abundantly Instead of bending its energies to the eradication of the large number of medical schools which are a blot upon its escutcheon, the profession establishes ever more, perhaps reasoning homeopathically that one poison will antidote another A motto which might appropriately adorn the portals of many of our medical colleges, were fitly expressed in the lines of the old doggerel "Will you walk into my parlor, said the spider to the fly?" Being generally a very inexperienced fly, fresh from sylvan groves, he often accepts the invitation, and can never thereafter extricate his feet from the mesh of inadequate instruction and indifferent example found therein Professional welfare is not a desideratum in the founding of most medical colleges, they being merely reflectors of personal ambition To most men the good of the moment is paramount Few there are who tempted upon the mountain of personal ambition, offered a professor's title or an enlarged fame and clientele, can, following the Nazarene, exorcise Satan

Excessive multiplication of medical colleges entails inferior instruction and example Prophets are not as thick as roses in June, and to be divinely called to the instruction of youth is a distinction to which few attain Too often men who have not sufficient interest in their profession to attend the meetings of a medical society, who, if they possessed the energy, have not the ability to write a correct medical paper, much less appreciate one and whose morals are for the most part in that nebulous stage where the distinctions of *my* case and *thy* case, are but dimly revealed, are, forsooth, set apart as instructors and inspirers of youth

Commensurate with the vast strides that medicine is making along the lines of bacteriology and physiologic chemistry, laboratories are demanded, requiring for their equipment large sums of money, generally not available to the small institution However, given the endowment the latter can build and equip the laboratory and call men of ability to professors' chairs You can make a bacteriologist in a laboratory you can not make a physician To make a physician demands a large clinical experience, legitimately obtainable only where there is a large dependent population, and hence only in metropolitan centers To acquire a knowledge of pathology demands a rich autopsical service, possible only in connection with large charity hospitals While to maintain clinics sufficient for the instruction of medical classes were in Chicago feasible and defensible, in the town of 50,000 it would well-nigh pauperize the entire population So irrationally have medical schools been established in our large cities that it is recognized by sociologists and charity workers as one of the most potent causes at work to undermine the sense of economic independence and self-respect in the community The clinics must be filled, hence, the ability to pay of those seeking relief can not be questioned The official of the railroad and the banker's wife seek unquestioned the free medical services offered therein Not alone are the laity pauperized, the young practitioner walks long and wearily in the borderland between inanition and starvation My statements are fact, not fancy

It is granted that there are men in the small towns and the country—that brooder of self-reliant strength—possessed of sufficient ability and character to honor a professor's chair, but this does not justify the founding of the medical college in their midst Let him who deems his light hid under a bushel remove to the medical center, where, if he possess transcendant ability, that recognition it merits will be vouchsafed

While we Americans are proud of our state universities which bring within the possibility of well nigh every young person the higher education, we must admit that they are liable to severe criticism A chief indictment is their incorporation of the medical department In no case does a state school take first rank among medical colleges, and with little exception to eliminate the medical department from the state university should be our constant aim Besides the objections already named, applying to state schools because of their usual location in small towns, their students lack the inspiration arising out of association with a large working profession and access to large medical libraries Boards of Regents need education along this line That a majority of our 173 medical colleges require a four years' course is no adequate basis for judgment as to their worth It has been said Better fifty years of Europe than a cycle of Cathay" A safe criterion is the old injunction "By their fruits ye shall know them" Teeth set on edge by sampling the product sent into many a hamlet is sufficient evidence that either the persimmon was prematurely plucked or intrinsically beyond the embrowning and sweetening influence of sun and frost

But not alone do we find explanation of the excess of medical colleges in the commercial spirit of the time There is an ultra-democratic tendency abroad—somewhat in disrepute at present in governmental circles—which maintains that nothing is too good for anybody, ignoring the fact that there is an aristocracy of intellect and character not dependent upon birth, to which, if our civilization is to grow and endure, we must entrust guidance If this be a trust, let us have it

While recognizing the great ability and disinterestedness of members of faculties, and the worthy equipment of graduates of our two Nebraska medical schools, I affirm that for Nebraska to maintain one medical school much more two, is in contravention of the fundamental law of professional progress Until the profession can be brought to this way of thinking, until, in the words of Emerson, "Private men can be brought to act with vast views," we can not look for amelioration of professional conditions

In closing, let me not be misunderstood I would not ignore the many noblemen in character and intellectual grasp, who have not behind them the momentum of birth or general culture, or best or even good medical training, but who have by innate ability, untiring devotion and unimpeachable honesty, won highest professional honors To such no added restrictions to entrance to the profession would oppose ultimate success Such are not the supporters of the diploma mill

"Hope springs eternal in the human breast," and that such is the case justifies the belief that there is ever a basis for hope Along with our commercialism, our intense individualism, there is growing a reactionary collectivism, proclaiming the solidarity of the race,

that the good of one is the good of all, upholding the law of individual sacrifice as the only saving grace Ultimately, he that exalteth himself shall be abased, is the case of the physician in the abasement of a prostituted profession The cosmic law of Huxley, tersely if inelegantly state as, 'Every man for himself and devil take the hindmost" has yielded in theory if not in practice, to the ethical, where personal sacrifice rules

In the service of a regenerated profession, let us conform to this law Let us not for personal ambition commit the unpardonable sin, medically considered, of further lowering educational standards, by foisting more medical colleges upon an already basely deluded public Let us labor unceasingly to raise professional standards by upholding the thorough preliminary education (a college course, and that not obtained from the sectarian academy of the cross-roads), medical reciprocity obtained by national regulation of medical schools and rules governing admission to practice, and the best professional training

Let fewer and better be our motto Let us discourage the entrance of the unfit into a profession to guard whose honor should be our every thought What I have said I enter as a protest against evils which are not chimerical, and which can not be met after the manner of that accorded to the prejudice in the rhyme by assuming an absent-minded air and walking directly through them as if they were not there They stand a solid and impenetrable hulk athwart the path of professional progress requiring for removal the lever of an intelligent and disinterested attitude on the part of the members of the medical profession

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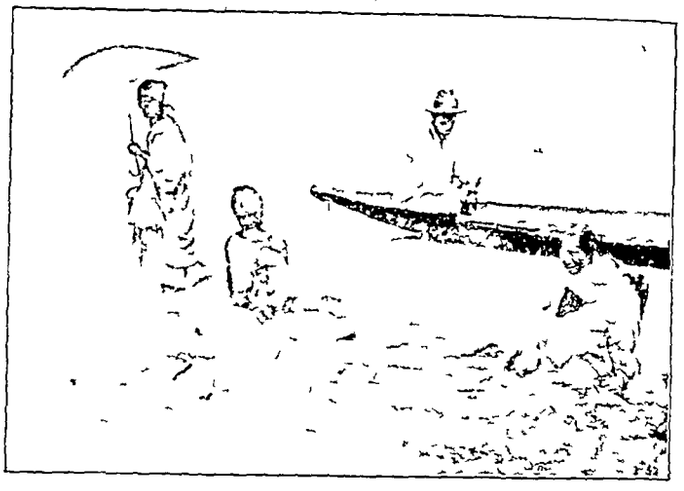
PHILIPPINE CUSTOMS AND HABITS

J C MINOR, M D
MAJOR AND SURGEON, U S VOLS
MANILA, P I

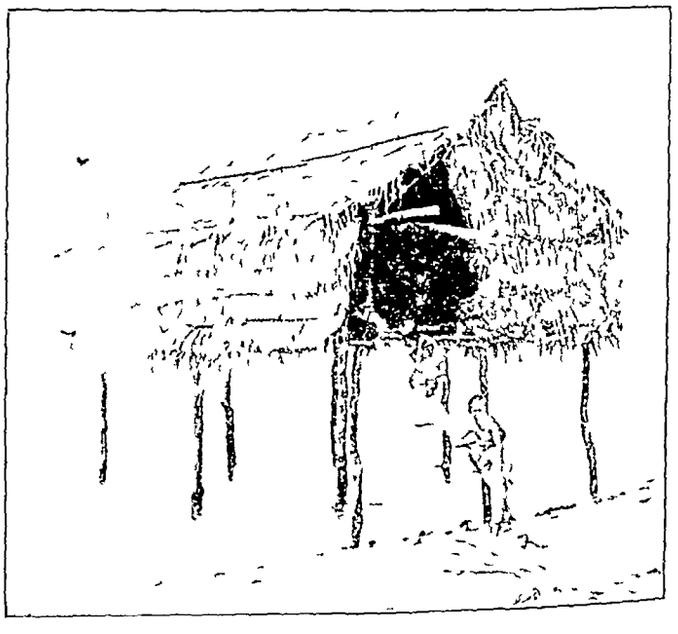
In the next decade there will be as great changes in the Filipino medical world as there will doubtless, be in the civil government of these possessions A record of a few of the things that are, may for comparison in some time to come be pleasant to remember, if not interesting now There are many customs among these people that have a naturalness about them that is refreshing, others that are deplorable, and others yet that so squint both ways that it is a pertinent question to ask Who knows which is right?

To the eye that sees in nature God's best gift—health, nothing can be more pleasing than the customary dress of the women of the Philippines From the artists' standpoint beautiful, from that of the sociologist unchangeable, and from the standpoint of the sanitarian healthful and therefore faultless No modiste of society's chameleon-like world has fashioned for woman a gown more pleasing than the *sarong* of the Moro, or the comfortably draped *hammaitin* of the Igarrote or Negrito It is true, one often feels a disgust for the apparent filthy garb among the lower classes of women while they work, but on a feast-day or a Sunday, one has to wonder at these same creatures as they appear with fan, cigarette and sunshade in their gowns of *jusi* and *pinya* to whisper devotion to the Virgin or whirl in the waltz at a *baile* One wonders at the hazardous manner in which the drapery clings to the wearer But for centuries the style has remained unchanged and these garments have faithfully adhered to each generation, namely, a *pannela* (or neckerchief), large loose sleeves, a loosely draped bodice or *camisa*, a gingham, calico, hemp, or silk brocade (according to purse) skirt, toe slippers—no corns, no corset and no tight bands—veritable walking advertisements for the late lamented Mrs Pinkham's shibboleth "yours for health" Childbirth among them is what I believe God intended it, a physiologic process and not a disease, nor a disgrace The occasion rarely demands the surgeon's aid, a female friend officiating more as a companion for the woman and nurse for the infant than for professional services The infant receives all atten-



Gathering at the River

tion The attention consists of annointing with cocoanut oil severing the cord and applying a clean cloth belly-band The new-comer is then wrapped in a towel, or among the better element attired in a little slip of some dainty fabric and laid aside for inspection by the friends who have gathered to welcome it to its new world, which in the absence of flannel possibly is already growing more or less chilly to the little adventurer

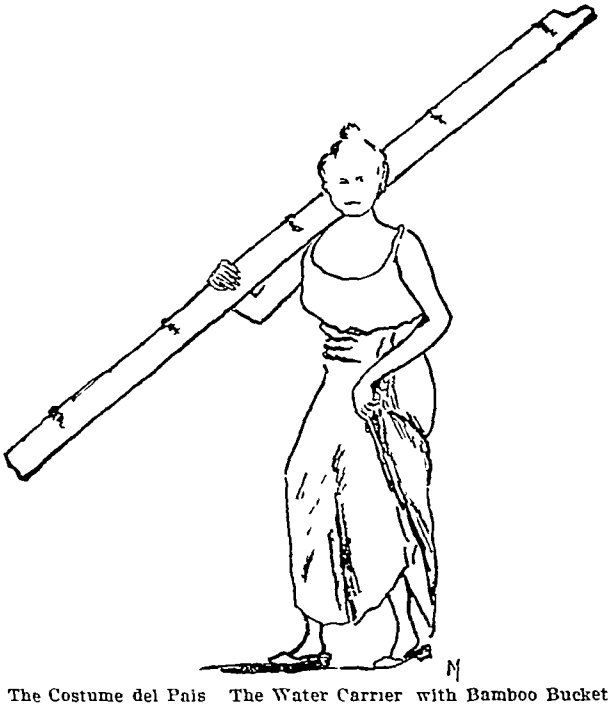


The National Bath open at all hours

Labor rarely consumes more than four hours Death of a mother in child-birth is infrequent, nor are puerperal sequelæ more frequent As a rule these hardy women are up and at work in a day or two, often they are not confined to bed at all and are in attendance the third day at the Christening *baile* (ball or dance) Abortion and miscarriage are seldom or never encountered if either does occur it is from accident and never induced Still-born babies are common

The people as a class seem to know little or nothing of what to do for *the helpless,* whether it be to assist an infant in its advent to the world or minister to the wants of an adult sick enough to go to bed They usually sit around and do nothing until Providence or Death relieves the sufferer

The corset, until the past year, in many towns has never been worn Now, many of the upper-ten Filipino



The Costume del Pais The Water Carrier with Bamboo Bucket

women imitate the *senorita Americana* by donning on feast days, etc , this agent of the devil and gynecologists Just how soon the civilizing influence will suggest to the Filipino mother the "inconvenience" of bearing children remains to be seen Now to be a mother seems

Smoking at the Baile

to be their dream of happiness Matrimony is held in high esteem by all the natives I have lived among Rape and illicit intercourse are seldom heard of A woman's highest ambition seems centered in maternity Her fondness for the first child is only exceeded by her expectations for the future The facility with which labor is accomplished doubtless encourages the industry, and so "pickaninnies' (as they are commonly called here) are as plentiful as blackberries

The fact is noticeable that these people are modest, and although they have no hesitancy in going more than half naked about their vocations and even obeying calls of nature by simply stepping a pace or two aside, they deem it shameful and unpardonable to make an indecent exposure of himself or herself to the opposite sex either in public or in private In my practice among them I have found it difficult to obtain an ocular examination of the genitals of the few men I have encountered with venereal diseases, and so far have been unable to make either a specular or digital examination of a native woman

Their unceremonious manner of stepping aside to relieve the bladder, any time or anywhere, possibly accounts in a great measure for the infrequency of vesical irritation, cystitis, enlarged prostate and other

Smoking at Work

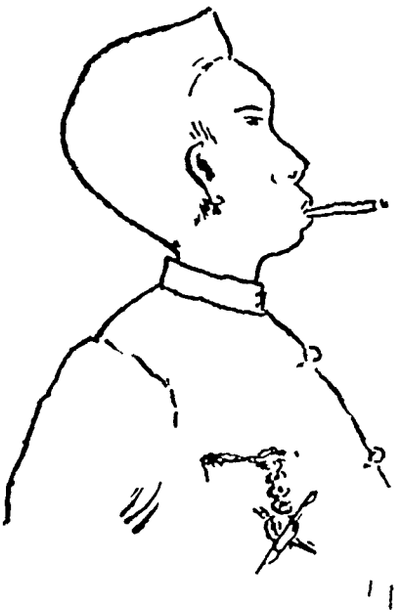
diseases dependent in origin on prolonged retention of urine and dilation of the bladder

SANITATION

Sanitation in the native hamlets of the Philippines is as simple as it is primitive There is no systematic manner observed in the disposal of sewage and wastes The well-to-do class have a bath room and closet, usually in the kitchen, always near the kitchen The bathing facilities in the aggregate for the well-to-do consist of a large cumbersome and homely tub or stone tank with half a dozen servants to fetch water The closet is generally a stone flume opening flush with the floor (an armed chair decorated like a throne sitting over the opening) and emptying either into a well for the purpose or having a side opening at the ground below with a trap door through which the deposited matter is removed or not according to the memory of the *major domo,* the olfactories of the household being so obtunded by tobacco smoking that they rarely sug-

gest to the owner of the house or its functionaries the propriety of an inspection The poorer classes have probably the more efficient method of disposal of wastes, certainly the most convenient and labor-saving Every native owns a hog, the native "presses the button" Sometimes an uneducated hog has to be tethered underneath the kitchen corner till he learns his business The poorer class bathes in public by getting under a spout in the rain or by douching with bucketful after bucketful from the well They never expose their persons in these ablutions The pickaninnies bathe without a rag on, anywhere and everywhere

They are opposed to putting offal in heaps or holes, but whether by reason or instinct or habit (I know not which) they scatter all rubbish to the four winds, or dump it into the most convenient water course At Zamboango (Mindinao) as also at Romblon and other places a sluggish but large mountain stream is artistically led and decorated with sod, flowers and bridges throughout the corporate space, and supplies the native contingent with baths, water for drinking and laundry purposes, all three acts were formerly played indis-



Smoking at Home

criminately at every and all points along the narrow space of this overworked stream Strange to say the population of the two towns mentioned (I am credibly informed) has never been affected with epidemic disorders It is difficult to account for this immunity unless it is because those who survive the atrocious ignorance displayed by parents in rearing them to the age of 10 years must be invulnerable thereafter

Though their method of scattering wastes to be dried and evaporated and carried off by the winds appears to have some virtue, such a method must be an important factor in producing the prevailing diseases in the towns, viz, skin affections, tuberculosis, etc, since they all are afflicted with the habit of drying the newly-washed laundry by spreading it out on the nearest stretch of ground I have seen in some of the laundrying neighborhoods the streets (there are no pavements) so covered by drying garments that one could walk past only by picking one's way and stepping over and jumping the various articles They never boil their laundry, wood is too scarce They are most of the time washing clothes and (it seems) the time not spent in this high calling they put in washing themselves, smoking, dressing and attending fiestas and funerals

Smoking is just as constant a quantity with a Filipino as "x" is with an algebraic equation It does not seem to matter a particle whether the proposition be a female symposium of washerwomen "gathering at the river" or a galaxy of beauty and white-duck at a church festival or a ball, one will find "x" = constant quantity = tobacco either in form of a cigarette or a cigar as big as a marlin-pin It is smoked by old and young, male and female Sometimes for a change they chew *buyo* This is to the native of the orient what "navy" and "climax" is to the American It is the betel-nut, or the nut of the *bongao* tree wrapped in the leaf of the *buyo tree* The nut is about the size and formation of the nutmeg and they cut it into four pieces Each piece with a pinch of lime is daintily wrapped in the green *buyo* leaf and sold to consumers for an eighth of a cent They keep it in the mouth like a quid of tobacco The ostensible effect is that of giving to the teeth an indian-red color The subjective effect is said to be sedative and pleasing after eating They chew it while at work also and the beginner expectorates a deal more than is consistent with decency The constant use of *buyo* seems to have a deleterious effect on the teeth, and both directly and indirectly it impairs the digestive function

In many towns the natives have come to believe that Americans are strong and large of frame because they do not use tobacco in childhood as do their own pickaninnies They do not seem to know that a Volunteer has to be strong and large in order to become one, so in many towns the council has forbidden the use of tobacco by children under 16 years

A statistical report on the mortality of children in this country would be of interest, the mortality under the age of 10 being high everywhere and in some localities as high as 90 per cent

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MEDICAL DEPARTMENTS IN PUBLIC LIBRARIES

C D SPIVAK, M D

President Colorado Medical Library Association, Editor Medical Libraries

DENVER, COLO

In the world of industry we witness a tendency toward co-operation, unification and centralization The one line store passes out of existence and its place is taken by the department store The same tendency is prevailing in the educational world The medical school proper is slowly disappearing and in its stead comes the medical department of the university The libraries in large cities like New York, Chicago, Boston and elsewhere are becoming in one way or another merely departments of one great library system The state libraries of several states have discarded the idea that its books are intended only for the delectation of the state solons—a law library pure and simple These progressive libraries collect, preserve and make available for the citizens of the state books on agriculture in its various subdivisions mining, engineering, natural philosophy, etc Medical departments in public libraries were but few until 1898,[1] when there were only 43 medical departments in the United States, including departments in university libraries that are not supported by the state Since 1898, however, the movement for the establishment of medical departments in public libraries spread rapidly, thanks to the passage

1 Spivak Medical Libraries in the United States, Phila Med Jour, 1898, vol II, p 851

of resolutions by two powerful organizations favoring such departments, namely, the AMERICAN MEDICAL ASSOCIATION and American Library Association

At the meeting of the AMERICAN MEDICAL ASSOCIATION, held at Denver in 1898, the following resolution was adopted

RESOLVED That the AMERICAN MEDICAL ASSOCIATION unanimously approves of any ethical and legitimate methods of encouraging the organization, perfection and support of public medical libraries in all cities, towns and villages of the United States, and urgently urges upon the members of the ASSOCIATION to aid in the formation and organization of such libraries

This resolution stands unique in the annals of medical history For the first time has the subject of medical libraries been brought up for discussion before such an august body

One month after the Denver meeting of the ASSOCIATION, the men who hold the keys to all the libraries of the United States met at Lakewood, N J, and passed the following resolution [2]

Whereas, the public library should be the means of stimulating all neighborhood, intellectual and scientific progress, and of representing the combined helpful forces ethical mental and sanitary furthering the well being of the entire community, it is therefore

RESOLVED, That in the opinion of the American Library Association it is both possible and advisable in the interests of the library, the profession and the community that public libraries should have medical departments and that physicians and medical societies be cordially invited to cooperate with the librarians and trustees of public libraries in establishing and maintaining such medical departments

Three years have passed since these two resolutions were adopted, and now a voice is raised in protest against "spending the money of the people for books benefiting only one class" [3] The author, Dr G E Wire, introduces himself to the readers as a graduate in medicine and also of a library school and therefore is presumed to know whereof he writes He is not satisfied with theoretic considerations alone, but he hurls an accusation against the physicians in stigmatizing the movement for establishing medical departments in public libraries as having grown out of the "ambition of a comparatively few men to make the people pay for books by which they may enrich themselves" He is especially bitter against the 2000 physicians of Chicago, from whom, in his five years of work in the Newberry Library, he could not "gain one iota of wisdom relative to the selection of books or periodicals" What personal grudge Dr Wire has against the physicians in general and the Chicago profession in particular I know not, but it sounds incredible that 2000 men who constantly read medical books and periodicals could not impart to Dr Wire one iota of wisdom concerning the things they are most familiar with Is not there, perchance, something wrong with the receptive faculties of Dr Wire? But admitting, for the sake of argument, that the physicians could not help Dr Wire in selecting books this argument does in no way militate against medical departments in public libraries It is not the duty of the physicians to select books it is the business of the librarian Dr Wire says, however, when he left the Newberry Library, the library contained 25,000 volumes and 400 current medical periodicals were received Dr Wire, then has evidently done his duty, whether with or without the aid of physicians Since he left (1895) the library doubled the number of its volumes, and is now considered one of the best medical libraries in the United States We know, also, that in the medical libraries of Philadelphia, New York, Boston, Brooklyn, Cincinnati, Denver, etc, the books are selected by committees composed entirely of physicians, and Dr Wire knows that these libraries will stand comparison with any special library in the world

The only argument of sociologic import which Dr Wire brings forward is that a public library should spend the money of the people for books benefiting the "public" at large and not a particular class of readers Now the question is, who is the "public"? What does the public read? If we should take as a criterion the nature of the majority of books read in the public libraries, then 95 per cent of the reading of the "public" consists of novels, the bane of every librarian of the land Yet there is no library whose stock consists of 95 per cent of novels Ought the public libraries exclude books on agriculture because this would be catering to farmers, books on chemistry because they supply the wants of chemists? Are not the few, the 5 per cent readers of "solid literature," who read books on psychology, biology, bacteriology, pathology, sanitation, physiologic chemistry, etc, the real "public," for whose sake books are written, published and preserved Without these few readers, the public libraries might as well shut up shop or limit their activity to dispensing cheap novels We have quite a different conception of the function of a public library namely, that it should be the repository of the world's literature, in the widest sense of the word and that it should endeavor to supply the varied wants of all its patrons

After Dr Wire has exhausted all his arguments, he says in conclusion "Why do they (physicians) not have their own libraries, supported by themselves as do the lawyers in every considerable city? You do not find lawyers clamoring for law departments in public libraries, and why should the physician be so favored at the public expense?" Dr Wire, who is a frequent contributor to library literature, and is at present a law librarian, ought to know something about the law libraries in the United States It seems, however, that even lawyers could not add to his wisdom Now let us be reasonable and look into the statistics of the subject According to the statistics of libraries in the United States, published in 1897 by the U S Bureau of Education,[4] there are about 100 libraries each devoted exclusively to medicine and law Out of the medical libraries only about ten are medical departments supported by the state or government, whereas every state or territorial library is *eo ipso* a law library, and therefore the number of supported law libraries amount to more than sixty That is the reason the lawyers do not clamor for law departments The lawyers have all they want without asking for it

We are sure the librarians and physicians of the United States, who have inaugurated the movement for establishing medical departments in public libraries will continue their good work, and we hope a time will come that whenever the people's money is spent for books, a part of this will go for the purchase of books of that branch of the useful arts which deals with the questions of how to cure prevent and eventually exterminate disease

2 Library Journal vol xxiii p 293

3 Medical Departments in Rate Supported Public Libraries Public Libraries May 1901 p 267

4 Statistics of Libraries and Library Legislation in the United States Washington 1897

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TRICHINOSIS AND TRICHINA INSPECTION

In his recent address before the Philadelphia Pathological Society Charles Wardell Stiles of the Bureau of Animal Industry at Washington, discussed in a very interesting manner the relations of trichinosis to public hygiene[1] He calls to mind that about half a century ago the late Joseph Leidy of Philadelphia, in a slice of cold ham which he had cut for the purpose of making a sandwich, made a discovery that was fraught with importance to medicine, to hygiene, to national economics, and to our diplomatic relations Leidy s scientific curiosity got the better of his appetite and he demonstrated that the little specks which attracted his attention were due to a small worm, *trichinella spiralis* Already described by Owens in 1835, Herbst shows by experiments that the worm could be transmitted through food, and Zenker in 1860 established definitely its relations to a form of disease which previously had been confounded with typhoid fever Eventually the discovery in which the ham sandwich figures so conspicuously gave rise to a special occupation giving employment to 40,000 to 50,000 persons, it resulted in the prohibition of American pork into Germany for a period of nine years, caused a bitter political fight in Germany and the farmers and exporters in this country a financial loss of millions of dollars, it saved hundreds of human beings from disease and death, inaugurated the most elaborate system of public hygiene ever put into practice and gave a mighty impulse to the study of etiology of disease

Stiles discusses ably the powerful influence which the discovery of trichinosis has exercised upon public hygiene and public policy and then turns to the question of the effect which American pork has actually had upon the health of Germany He above all others is most competent to speak with authority upon this point because he has investigated the question thoroughly, having been delegated by the authorities at Washington to go to Germany for that particular purpose It is pointed out that there are two methods available for preventing trichinosis a disease which once established is beyond medical treatment, namely, microscopic inspection of the pork before it is sold, and education of the people to avoid eating pork before it is thoroughly cooked or cured, to do away with offal feeding of hogs, and to regulate the country slaughter house In Germany there is a widespread custom of eating raw pork, and the German microscopic inspection—for which purpose 27,602 persons were employed in 1896—is certainly calculated to foster the custom of consuming raw pork because it gives rise to a feeling of false security among the people During the exclusion of American pork from Germany (1883-1891) there was reported from that country an annual average of 454 7/9 cases of trichinosis, with 30 4/9 deaths Since the readmission of American pork (1892-1898) the annual average has been 149 cases, 3 6/7 deaths, so that it can not possibly be maintained that American pork has caused any increase in trichinosis in Germany In fact, Styles shows conclusively by a summary of German statistics based on German evidence that the sanitary quality of American pork exported to Germany is fully vindicated Indeed, he goes so far as to intimate that the total prohibition of German pork in Germany and the compulsory use of American pork "would probably do more to eradicate trichinosis than does their elaborate and expensive microscopic examination" Not a single case of trichinosis has been traced to the more than 200,000,000 pounds of pork exported from this country to Germany during 1892-1898 No one has claimed a reward of 1000 marks offered since two years by American importers to the first person who can "prove a case of trichinosis in man in Germany due to American cured meats or sausages imported under the American certificate since 1891" The important lesson in public hygiene from the figures and arguments presented by Stiles is that the present curing methods employed in this country are superior to a general compulsory system of trichinia inspection

That the custom of eating raw pork obtains at least to some extent among Germans in this country is probably indicated by the fact that of 274 American cases collected by Stiles, in which the nationality was ascertained, 76 per cent were Germans

THE RELATIONS BETWEEN ALCOHOLIC INDULGENCE AND VENEREAL DISEASE

Of all the infectious diseases there is none so easily and so surely avoidable on the part of the individual as the venereal diseases It becomes therefore a most important matter to inquire into the influences that lead up to exposure and favor infection and to aim at their removal as far as possible Now, alcohol gives rise to certain physiologic effects that may result either in simple functional disturbances or in actual structural or organic disease While alcohol is primarily a stimulant, it becomes, when taken in large amounts or for long periods a depressant, lowering inhibitory activity, especially as exhibited in the psychic sphere It is in this way that it leads to sexual abuse and that it acts as a predisposing cause of the venereal diseases Of this relation practical experience affords abundant evidence, a statistical presentation of which has been undertaken by the distinguished psychiatrist Dr Aug

1 Proceedings Path Soc of Philadelphia, 1901, iv, 137 153 THE JOURNAL A M A, xxxvi, 1577

Forel[1] who dwells upon the frequency with which alcoholic indulgence on the part of young men, and even of young women, leads to illicit sexual intercourse, with its obvious attendant dangers, while he points out upon the other hand that a large proportion of prostitutes are the offspring of alcoholic parents In both sexes alcohol increases sexual desire, while it blunts the moral sense and lowers the powers of resistance It further increases indifference to the results of illicit intercourse and carelessness in their prevention

It was found that among 179 cases of venereal disease the larger number included students (54), soldiers (31) officers (23), officials (13) teachers and physicians (6) while there were also 30 laborers and 10 prostitutes Of the 169 cases in males, the attack of gonorrhea was acquired by 1 while in a state of chronic alcoholism, by 12 while in a state of acute alcoholic intoxication, by 42 while in a state of mild alcoholic stimulation and by 59 while in a state of sobriety whereas syphilis was acquired by 64 while in a state of acute alcoholic intoxication, by 13 while in a state of mild alcoholic stimulation and by 36 while in a state of sobriety Of the 10 prostitutes 6 were affected with syphilis and had been infected while intoxicated The remaining 4 had attacks of gonorrhea, which were acquired in 3 while in a state of mild alcoholic stimulation and in the remaining 1 while in a state of sobriety It thus appears that infection was favored by mild indulgence in alcohol in 43 8 per cent of the males and in 90 per cent of the females

Among 219 other cases (190 in men and 29 in women) it was found that venereal infection was far more common in conjunction with occasional than with habitual alcoholic indulgence and that when present in cases of the latter it had generally been acquired before the habituation had been established Less than one-quarter of the cases were in a state of sobriety and more than three-quarters were under the influence of alcohol when infection occurred, while one-half were in a state of mild alcoholic stimulation Syphilis appeared to be much more common than gonorrhea in chronic alcoholics

Infection occurred in 66 cases between 21 and 25 years of age, in 64 cases between 26 and 30 years, in 33 cases between 17 and 20 years and in 25 cases between 31 and 35 years Of these 214 cases in which infection occurred primary intercourse was illicit in almost all (192) and marital in but a few (7), the character not being ascertainable in the remaining 15 Of the first of these three classes infection was acquired in 79 while the individual was under the influence of alcohol and 74 while in a state of sobriety, while in 39 information on this point could not be secured

It is properly not contended that the infecting coitus would not have taken place in all instances in the absence of alcoholic indulgence, but it seems likely that it would not have occurred in most instances, and that in those instances in which it had taken place precautionary measures would otherwise have been adopted that would greatly have lessened the risk of infection, and it is probable that in a number of cases in which it was stated that the patient was entirely sober there had really been some alcoholic indulgence, so that this fact would compensate for possible error on the other side

The foregoing data, while perhaps not so extensive as they might be, merely confirm the conclusions arrived at from *a priori* reasoning and it would seem that an important means for the prevention of the venereal diseases with their disastrous results, consists in the avoidance of alcoholic indulgence

1 Wiener Med Wochenschrift 1901 Nos 16 17

A NEW METHOD OF TREATMENT FOR INOPERABLE CARCINOMA OF THE BREAST

The industry with which the study of carcinoma is being pursued raises the hope that we shall before long be made familiar with its causative agent and be thereby provided likewise with the means for its prevention and possibly also for its cure The attainment of these objects is especially to be desired, inasmuch as carcinoma is one fortunately of a gradually lessening number of diseases in the face of whose treatment the physician stands almost hopeless and helpless It is true that early and adequate surgical removal will in a gratifying proportion of cases be attended with permanent cure, but only time can then bring assurance that all morbid tissue and cells have been removed and that metastasis has not already occurred and recurrence or even redevelopment will not take place For these reasons any method of treatment, however startling and unusual that promises amelioration, if not cure, and does not unduly imperil the safety of the patient should receive respectful and considerate attention, especially if it emanate from a reputable source A suggestion along these lines has recently been made by Mr Cecil H Leaf assistant surgeon to the London Cancer Hospital[1] with regard to treatment of cases of carcinoma of the breast that are unsuited for operation He points out that with the exception of oophorectomy, conjoined with the administration of thyroid extract, the measures heretofore employed have had little effect in checking the onward progress of the disease and that even by this means, although the growth may be temporarily arrested, no permanent good is effected, signs of renewed activity again becoming apparent after a time

The principle proposed by Mr Leaf consists in an attempt not to destroy the carcinoma cells, but to prevent them or the agent that causes their multiplication from passing along the lymphatics and invading the internal organs For this purpose he applies over the new-growth or the recurrent nodules a large vulcanite shield adapted accurately to the skin and including as large an area of surface as possible The shield is fitted at the bottom with a gauze India-rubber inflatable

1 Edinburgh Med Journal May 1901 p 452

tube exactly similar to that of an ether-inhaler, and at the surface it is provided with a small tap to which can be adjusted any ordinary air-pump, so that the air in the apparatus can be thoroughly exhausted By this means a force is provided that it is hoped will as long as it is in action constantly restrain the noxious agent from passing to the deeper lymphatics and thus prevent or delay dissemination A glass window in the top of the shield will permit observation of the degree of suction that is being made The apparatus should be worn as nearly constantly as possible In addition, absolute rest for the arm on the affected side is insisted upon to favor quiescence in the lymph-stream The existence of ulceration is considered an advantage rather than a contraindication to the treatment, as the cells and juice are then more readily drawn to the surface and gotten rid of entirely In the absence of ulceration it is encouraged by the constant use of boric-acid fomentations, which soften the fibrous tissue that is present, so that the channels in which the cells and carcinoma-juice travel become less constricted and the suction is then rendered more effective It might even be advisable to make multiple punctures or incisions

Three illustrative cases are reported in which the treatment was employed, but in none had sufficient time elapsed to permit of any but a tentative opinion, nor is any statement made as to the histologic characters of the neoplasm The cases to which the treatment is thought to be adapted comprise those with ulcerating schirrus adherent to the pectoral muscles and enlargement, matting together and adhesions of the axillary glands, and those in which after one or more operations recurrence has taken place in the pectoral muscles or the lymph-glands or both

THE ST PAUL MEETING

The last meeting of the AMERICAN MEDICAL ASSOCIATION was in many ways a remarkable one and successful in every way The scientific work of the Sections without exception, was of the highest quality, and the amount of work done in practically all of these scientific branches exceeded the average, although the total number of papers read was less than usual While the papers in almost every instance were above the average in scientific interest and practical value the discussions were still more so

The attendance at the Sections was very large, especially in the Sections on Surgery and Anatomy, on Obstetrics and Diseases of Women, and on Practice of Medicine The number in attendance at each of these ran up as high as seven hundred at one time

The subject of reorganization of the ASSOCIATION was one that created much interest and was the main topic of conversation outside of the Section work The report of the Committee, as given in our issue of May 25, was accepted almost unanimously The adoption of this new order of things will make the future meetings of the ASSOCIATION different in many respects from what they have been in the past The elimination of the general meeting in the morning, after the first day, will give much more time for Section work while the general meetings for the orations coming in the evening will interfere but little, if any, with the social functions The possibility for more deliberate consideration of the important questions that come before the ASSOCIATION can not but result beneficially, but what is of most importance is the fact that it will bring the state societies into more direct touch with the parent association and with each other, the resulting good of which can not be overestimated

While there was much fear on the part of many members that the city of St Paul would not be capable of accommodating so large a body, these fears were not realized, for although there may have been a little crowding in some respects, as a rule, general satisfaction was expressed at the accommodations furnished for the members of the ASSOCIATION The members of the profession of St Paul and Minneapolis deserve the highest praise for the excellent manner in which they entertained their guests, the visitors will look back to the meeting of 1901 with satisfaction and pleasure While the attendance was not quite as large as that at Atlantic City last year, which was the largest in the history of the ASSOCIATION, the meeting just closed, considering its geographical location was well attended The registration last year was 2019, while this year it was 1806

THE EXCLUSION OF CONSUMPTIVE IMMIGRANTS

The exclusion of tuberculous immigrants by the Government officials at the port of New York, is on the whole a salutary measure, though scarcely for the reason popularly assigned The inspection for tuberculous immigrants can not well be so thorough as to cull out all infected individuals, and the most that can be expected from it is the exclusion of more or less advanced cases where the physical and rational signs are sufficiently obvious Anything more rigid than this would meet with difficulties and probably be very imperfectly carried out Nothing short of a tuberculin test would absolutely exclude all cases, and we doubt whether the Government will adopt that precaution If it did, it is we believe safe to say, it would be the most efficient check on immigration possible, and we might perchance find only the minority passing it successfully The exclusion of consumptives is excusable on the ground that it is not the policy of this country to accept immigrants who being hopelessly diseased, are practically incapable of becoming useful members of society and liable therefore to be a burden to those among whom they come This reason therefore applies to advanced and presumably incurable cases It will undoubtedly work hardship in individual instances and there should be some discretion allowed Even hopeless consumptives may sometimes bring some good, a rule that would have sent Robert Louis Stevenson back to Scotland is scarcely to be followed without exceptions It would be well if

we could apply a still more rigid test to exclude the syphilitic, the epileptic the insane and the criminal immigrant, in fact the degenerate classes generally, from our shores At present we have more than our share of Europe s output in that line

CORONER S JURY VERDICTS

The beauties of "crowners' quest law" are continually being illustrated In a trial just closed in one of our cities it appeared that a reported inquiry over a suspicious death was probably never legally made, the verdict was made up with apparently fictitious names, by the deputy coroner, a politician who evaded summons and could not be found The body had been promptly cremated and any evidence of foul play thus pretty thoroughly destroyed This illustrates the rascally side of the present system and leads to a strong suspicion that "fake" inquests may be more common than has been supposed An inquest really amounts to very little in the majority of cases, the jury contributes only an element of ignorance, and it is not surprising that an unprincipled ward-politician, such as many of our city coroners and coroner's deputies are, concludes occasionally to dispense with it and pocket its fees What a jury can do in the way of irrationality, on the other hand, is shown in a recent verdict in another city where an inquest was held on a severed head of a human being and a verdict rendered of suicide The paper from which we have the latter account says "It was not a ghastly joke, such as was perpetrated by a jury in a southern town the other day, where after inquiring into the death of a negro who had been insolent to a white man, the verdict was given out that the man had committed suicide" That was the brutal humor of the participant after the act, the deliberate condonation of homicide In the other we have the perhaps worse than stupid, the absolutely thoughtless routine acceptation of the first suggestion that offered without regard to facts All these only indicate the average worthlessness of the coroner's inquiry and the need of reform Not only justice but common decency call for a change, and the medical profession is the motive force which must inaugurate the much-needed reform When we begin as a profession, to recognize and take up our public responsibilities, the removal of this important function from the hands of incompetent and often worse than incompetent politicians will not be one of the least important benefits that we can endeavor to confer upon our fellow-citizens

THE CAUSE OF DEATH FROM PERFORATIVE PERITONITIS

While the conditions under which peritoneal infection takes place have been quite clearly established, a like statement can not be made with regard to the cause of collapse and death in the presence of peritonitis Inflammations of other serous membranes do not, as a rule, terminate fatally, so that there must be some special reason for such an outcome in cases in which the peritoneum is involved This was at one time thought to reside in reflex influences but at the present day the opinion prevails that it is due to intoxication resulting from the absorption of the morbid products of bacterial activity, or to the taking up and dissemination of the bacteria themselves Either of these events, it is thought, may take place even before the local lesions have become obvious It has, however, been shown that irritation of the peritoneum may induce reflex reduction in the blood-pressure, with resulting heart-failure, while, on the other hand, bacteria have been found in the blood often in conjunction with almost negative local conditions In order to determine so far as possible the exact mechanism by which the evil results of perforative peritonitis are brought about Heineke[1] undertook an experimental investigation, using rabbits for this purpose Through a small opening in the abdominal wall a loop of small intestine was brought out, a small laceration made, hemorrhage controlled, the bowel returned, and the abdominal wound closed The animal soon recovered, but in the course of from six to eight hours symptoms of peritonitis made their appearance, shortly terminating fatally As a result of this study it was found that death under the circumstances detailed was due to paralysis of the centers in the medulla oblongata, involving principally the vasomotor and largely the respiratory Marked disturbances in circulation were observed earlier than those of respiration although breathing ceased before the heart's beat The circulatory disturbances are attributable to the paralysis of the vasomotor center, the heart not being directly affected They are entirely analogous to those attending the infectious diseases The paralysis of the nervous centers is due to the absorption of bacterial products from the peritoneum into the blood, the perforation of the bowel as such not inducing any circulatory disturbance

FOURTH OF JULY TETANUS

For some years past the increasing use of various explosives in order to celebrate our day of national independence, the Fourth of July, has been followed by a noteworthy number of fatal cases of tetanus, especially among the youth in our large cities According to Wells,[1] 27 boys ranging in age from 10 to 17 years, died from Fourth of July tetanus in Chicago last year In all but one case the atrium was a wound, generally of the hand, produced by blank cartridges, the exception being a wound from a toy cannon The period of incubation varied from five to nine days, death resulting in from six to eleven days after the accident The infection seems to have been of a decidedly virulent type Wells set about to discover the exact etiology of this sad accompaniment of patriotic exuberance A careful and extensive study of the different materials in blank cartridges on the market in 1899 and again in 1900 failed to reveal tetanus bacilli in a single cartridge Now, tetanus is endemic in Chicago, and presumably also elsewhere, and in the cases that follow wounds other than those incident to the use of explosives, the bacilli are unquestionably introduced by means of dirt Wells readily found tetanus bacilli in Chicago street dirt, and so its stands to reason that the lodgment of the wadding of blank cartridges under the skin of the hands and elsewhere is exceedingly liable to carry in

1 Deutsches Archiv für Klin Med 69 B 5 6 H p 429
1 Medical News 1901

bacilli present in the dirt and other foreign substances upon the surface of the skin The resulting wound is usually long and narrow, blood-clots and infiltrated tissue are present as well as ordinary aerobic, oxygen-consuming bacteria—all favoring proliferation of the anaerobic bacillus of tetanus As the matter stands, a Fourth of July wound of this character places a grave responsibility upon the physician who is consulted From the information gathered in the timely article by Wells it appears that physicians in general are not always as painstaking and thorough as they should be in cleansing cartridge wounds and in removing the last vestige of extraneous substances, especially pieces of wadding Veterinarians report excellent results from the use of tetanus antitoxin as a prophylactic in horses, but its employment for this purpose in man has been neglected too much so far, probably because of the rather disappointing results of its use as a curative agent after the intoxication has become apparent and lockjaw established In the future all wounds caused by explosives such as are in vogue on or about July 4th, should be rendered surgically clean as early as possible, and drained freely, for this purpose the wounds should be freely exposed by liberal incisions wherever indicated so that free access is gained to the innermost recesses of the wound in order that wadding and dirt may not remain and favor the growth of bacilli As tetanus may occur even when wounds are well cleansed and drained, tetanus antitoxin is indicated and the prophylactic dose suggested by Wells is 5 c c This is certainly an ample quantity Finally, physicians should use their influence in favor of some less harmful outlet for patriotic enthusiasm than the production of noise

THE CREMASTERIC REFLEX IN SCIATICA

A study of the reflexes is often capable of yielding important information in the diagnosis of disease, especially involving the nervous system The presence of a given reflex will be dependent upon the integrity of the arc constituted by an afferent nerve the related portion of the cerebrospinal axis and an afferent nerve Reflex activity is normally somewhat restrained by physiologic inhibition, and it may be reinforced or intensified by influences that lessen the latter through sensori-motor or psychic channels, while it is exaggerated in the presence of irritative conditions and lesions in the course of the sensori-motor arc The appearance of the reflexes may be prevented by mechanical influences, such as rigidity, by increased inhibitory activity from whatever cause, or by abolition of any portion of the sensori-motor arc Inasmuch as pain tends to reinforce reflex activity one is prepared to learn that this manifestation is generally increased in cases of neuralgia and—at an early stage before degenerative changes have taken place—even when this is of inflammatory origin In this connection we wish to refer to a recent communication by Dr G A Gibson[1], in which attention is called to a remarkable exaggeration of the cremasteric reflex in cases of sciatica, not alone in those of the more serious neuritic type of the disease—attended with muscular wasting and alteration in the electric reactions—but also in those of the less grave neuralgic variety The reflex was obtained not only by gently stroking the skin on the inner aspect of the thigh, but also and much more readily by firm pressure over the lower and inner portion of Scarpa's triangle, whose sensory nervous supply is derived from the internal cutaneous branch of the anterior crural nerve The latter procedure was in some instances followed slightly later by a less distinct contraction on the opposite and unaffected side The exaggeration of this reflex was found in cases not exhibiting much increase in the knee-jerk, as well as in others with great augmentation of myototic irritability In some instances the plantar and gluteal reflexes were exaggerated equally with the cremasteric, in others the last was marked, while the former were scarcely elicitable In no instance was the increase in the cremasteric reflex associated with dorsal flexion of the toes on irritation of the sole of the foot In explanation of the phenomena described it is suggested that in the presence of sciatica the segments of the cord above the level of origin of the sciatic nerve from the lumbo-sacral cord—including therefore the second lumbar, in which the cremasteric reflex center and also the knee center are believed to be situated—are in a state of excessive irritability, while the segments below—in which the plantar, the gluteal and the ankle centers are situated—are but little if at all influenced

1 Edinburgh Med Jour, May, 1901, p 459

Medical News

ILLINOIS

The Physicians of Sterling met May 24 at the office of Dr Frank Anthony, to endeavor to establish a uniform fee bill

Dr Miles D Baker has been appointed first assistant at the Illinois Southern Hospital for the Insane at Anna, and Dr David R Sanders, Jonesboro, superintendent of the annex

Chicago

Dr Gustav Fuetterer who has been professor of pathology at Northwestern University Medical School for the past two years, has resigned

Dr Christian Fenger was made an honorary member of the Association of Military Surgeons of the United States, at its meeting May 31 in St Paul

"Dr" Orlando E Miller, of O E Miller Hernia Treatment Company fame, seeks, by due process of law, to be relieved of an indebtedness of $586,943 He has no available assets

Dr E S Pettyjohn, who has been abroad for a year studying in Berlin and Vienna and visiting hospitals, sanatoria and mineral springs, sailed for New York May 23, on the *Potsdam* He intends to locate in Chicago, making a specialty of nervous diseases

In the "Bulletin" for the week ended May 25 it was said that "it is not probable that the total deaths for the month will much exceed 2000" The actual number is 2046, giving an annual mortality rate of 13 7 per 1000 of the estimated mid year population, to wit, 1,758,025 For the week the total deaths were 472 and the annual rate was 13 99 Only measles, among the more important causes of death, continues to give any concern Attention has been called in three previous bulletins to the unusual prevalence and severity of this disease and advice given against exposing children to its contagion During the past week there were 10 deaths reported from this cause, 7 of them being fatally complicated with whooping cough—which disease also continues to prevail to an unusual extent

IOWA

Dr Charles B Adams, Estherville, has been elected president of the State Board of Medical Examiners

Dr John C Shrader Iowa City, has been re elected president, and Dr Josiah F Kennedy, Des Moines, secretary of the State Board of Health

Barnes Graduates Admitted—The State Board of Medical Examiners has decided to admit to examination the two graduates of Barnes Medical College of St Louis who were refused examination a short time ago by the secretary on the ground that the college did not live up to the requirements of the state law

MARYLAND

Dr Delmar Smithers was elected president of the Chesapeake City Town Commissioners, June 4

Dr Harry S Jarrett of Towson, has been elected president of the first board of pension surgeons at Baltimore

Baltimore

John L G Lee, B A LL B, has been elected president of the faculty of the Woman's Medical College

Dr George H Stewart has succeeded Dr S Pepchy Latane as medical superintendent of the Maryland University Hospital

Gone to Europe—Among those who have left for Europe are Drs Richard H Thomas Joseph Erlanger and Samuel C Chew

The Johns Hopkins Register for 1900 1901 just out shows 200 students in the medical departments and 149 graduate students

Drs Mary Cook Willis and Jessie M Thornton have been elected resident physicians of the Good Samaritan Hospital for the ensuing year

Dr William Osler will visit Holland this summer and will especially be interested in the University of Leyden, so full of reminiscences of Boerhaave and other medical worthies of the 18th century

Dr William Royal Stokes, city bacteriologist has been elected professor of pathology and bacteriology in the College of Physicians and Surgeons, of Baltimore Prof N G Keirle retains the chair of medical jurisprudence and the directorship of the Pasteur Institute connected with the college

The Woman's Medical College Association elected the following officers President, Dr Flora Pollack vice presidents Dr Mary Lois Jones recording secretary Dr Marie Thalwitzer corresponding secretary Dr Jessie M Thornton, treasurer Dr Mary Willis

The graduating class of the Johns Hopkins Medical School is by far the largest in the history of the university In it are representatives from all parts of America, India and Hawaii The class number 56 consisting of 47 men and 9 women The examinations closed May 31 the commencement June 7

The following appointments have been made at the Johns Hopkins University Fellowship in the Medical School provided by the liberality of the Baltimore Association for the Promotion of the University Education of Women, Florence R Sabin M D, Fellowship in English, Louis Wardlaw Miles A B, M D, Fellowship in pathology Dorothy M Reed, B L, M D

The mayor has appointed the following as a municipal hospital commission to provide for the building of an infectious disease hospital The mayor health commissioner, Mr Henry Williams and Drs Wm H Welch I Edmonson Atkinson, John D Blake and John W Chambers The commission will select a suitable site arranging for its purchase and preparing preliminary plans for erection of building

Johns Hopkins New President—The selection of Professor Ira Remsen, professor of chemistry in Johns Hopkins University, to succeed Dr Daniel C Gilman as president of that institution, has been made public Professor Remsen has held the chair ever since the foundation of the institution in 1876, and his works and researches have given him a world wide reputation His executive ability has been manifested not only in the development of his own department, but while acting president on several occasions during the absence of President Gilman he has displayed qualities that have strongly commended him to the Trustees He is a man of mental breadth as well as common sense and scientific attainments and it is believed that his administration will mark the beginning of a new era in which the University will emerge from the difficulties that have surrounded it for some time past and enter upon a period of increased strength and usefulness It is understood that Prof Remsen will continue to direct the chemical laboratory Prof Remsen was born in New York City in 1846 He studied at the College of the City of New York and was graduated in medicine from the College of Physicians and Surgeons in 1867 He then studied abroad in the Universities of Munich and Gottingen for three years receiving the degree of Doctor of Philosophy at the latter in 1870 From 1870 to 1872 he was assistant in chemistry to Prof Fittig in the University of Tübingen In 1872 he was made professor of chemistry and physics in Williams College, Massachusetts, where he remained until called to the Johns Hopkins in its opening in 1876 Dr Remsen is one of the best lecturers in the University, and takes the deepest interest in the researches of his pupils His best known work is on the relations between oxygen, ozone and active oxygen, the influence of magnetism on chemical action and the discovery of saccharin He founded in 1879, and has since conducted, the *American Chemical Journal* His works have gone through several editions and have been translated into German, Italian and French They are used as text books in many colleges of England, Germany Australia and America

MASSACHUSETTS

Leominster has provided two houses to be used as an isolation hospital

Carney Hospital, Boston, will receive $56,500 from the estate of Julius Adams

Dr Michael J O'Meara, Worcester, has been made physician at Holy Cross College, vice Dr Charles F Fitzgerald resigned

The Newton Hospital and other institutions in Newton benefit to the extent of $46 000 by the will of the late Mary Shannon, a resident of that place

The King's Daughters and Sons' Hospital, Springfield has applied to change its name to "The King's Daughters and Sons' Hospital Company, of New England" It was also voted to so enlarge the hospital that space might be secured for incurable patients

MISSISSIPPI

Dr E Knox White, formerly of Steen Creek has been appointed health officer of Simpson County

Smallpox caused 456 deaths in Mississippi out of 2066 cases reported in the first six weeks of the year, a death rate of about 20 per cent

Dr William W Payne Meridian, was reappointed division surgeon of the Mississippi Division United Confederate Veterans May 20

Dr James W Lipscomb, Columbus, has been appointed health officer of Lowndes County, succeeding Dr John Brown rigg who declined reappointment

NEW YORK

Dedication of Loomis Buildings—On May 28, Bishop Potter consecrated the Church of St Luke the Beloved Physician, and dedicated the buildings of the Loomis Sanatorium at Liberty

Buffalo

Dr Lorenzo Burrows, Jr, of Buffalo has been appointed a member of the Buffalo Board of Pension Examining Surgeons, vice Dr E W Abbott deceased

Measles Among the Eskimos—There is a small epidemic of measles existing among the Eskimos located at the Pan American Exposition There have already occurred a number of deaths from this disease

Dr Irving M Snow, of Buffalo invited the members of the American Pediatric Society from Niagara Falls to visit the Pan American Exposition, and to dine at "Alt Nuernberg" A number of Buffalo physicians were asked to meet the visiting guests and a very enjoyable evening was passed on the Exposition grounds

New York City

Another Surgeon's Mistake—On May 21, a wealthy real estate dealer of New York, who had suffered for two years from epilepsy, was taken in a patrol wagon to the Bedford avenue police station and locked up in a cell while in a semi conscious condition Two surgeons of the Williamsburg Hospital considered him intoxicated and he was held under a charge of intoxication

New Water Supply Needed—Persistence of typhoid fever in New York City proves that the health of the community requires a new source of supply The watershed of the upper Hudson seems far away, but there is no nearer route by which pure drinking water can be obtained An aqueduct from Lake George would cost $100,000,000 but this is a sum not considerable as the price of the health of millions

Rockefeller Institute for Medical Research—The United States is to have an institution for medical research similar to the famous Pasteur Institute of Paris and the Koch Institute

of Berlin John D Rockefeller has provided $200,000 for preliminary work on the project, and is expected to endow it when plans are finally agreed upon It will be located in this city, with branches in every large city in the country It is to be called "The Rockefeller Institute for Medical Research," and has been incorporated The purpose of the foundation is to furnish facilities for original investigation, particularly in medicine and hygiene as have a practical bearing upon the prevention and treatment of disease The board of directors as at present constituted is as follows Dr William H Welch, Baltimore, president, Dr T Mitchell Prudden, New York, vice president, Dr I Emmett Holt, New York, secretary, Dr C A Herter, New York, treasurer, and Drs Theobald Smith, Boston, Simon Flexner, Philadelphia, and M H Biggs, New York

NORTH CAROLINA

Dr William H Cobb, Jr, has been elected city physician of Goldsboro

North Carolina Medical College, Davidson, held its eighth annual commencement exercises, May 13, graduating a class of eight

Dr William D McMillan, Wilmington, on May 6, was unanimously re elected superintendent of health of New Hanover County

State Board of Health—The governor has appointed the following members of the board Dr Richard H Lewis, Raleigh, Dr Francis Duffy, Newbern, Dr George G Thomas, Wilmington, and Dr William P Ivey, Lenoir

OHIO

Cincinnati

Cincinnati Academy of Medicine—The regular meeting was held in the amphitheater of the Cincinnati Hospital, May 27, at the invitation of the Board of Trustees The occasion was the official opening of the new laboratories Speeches were made by Dr P S Connor, on behalf of the Board, Dr N P Dandridge, president of the Academy, G A Fackler, president of the hospital staff, J E Greiwe, director of laboratory

The medical staff of the Cincinnati Hospital held its annual election of officers on May 30 The result was as follows Dr G A Fackler president, Dr B K Rachford, vice president, Dr Arch I Carson, secretary, Dr P S Connor, librarian

The Society of Ex Internes of the Cincinnati Hospital held their fifth annual meeting and banquet on June 1 About sixty were present Dr D I Wolfstein acted as toastmaster, and toasts were responded to by Drs John H Landis, Joseph Ransohoff, W E Crane, William Muehlberg, and S E Allen Dr A B Thrasher was elected president for the ensuing year

Presbyterian Hospital Staff—At the annual meeting, June 3, Dr W H Taylor was elected president for the coming year, Dr E Campbell, vice president, and Dr Estella Riley, secretary Dr D I Wolfstein, formerly professor of pathology in the Ohio Medical College, has resigned to accept the chair of neurology at the Cincinnati College of Medicine and Surgery

PENNSYLVANIA

An isolation hospital has been prepared for the reception of smallpox patients on the county almshouse farm, east of Lebanon

Two New Hospitals—By an agreement of legislators, Western Pennsylvania is to have two new hospitals The West Penn Hospital, Pittsburg toward which the state will give $200,000 provided the hospital secures a like amount, and the Allegheny General Hospital, which has already raised $200,000, to which the state will add $100,000

Philadelphia

St Joseph's Hospital Internes—The following are the successful applicants for interneships at St Joseph's Hospital Drs Foulkrod, Rigel Homer Rhode, Mervin R Taylor and Lamott

Reunion of Class of 1891—Dr Matthew M Smith, Austin, Texas, president of the class of 1891, Jefferson Medical College, has called a meeting of the class to be held in Philadelphia, June 28 and 29

Dr A Donaldson Smith, at a recent meeting of the Royal Geographical Society, received the Patrons' medal for his journey to Lake Rudolf, south of Abyssinia

Unclaimed Dead—The distribution of unclaimed corpses to the various medical colleges for dissecting purposes has produced friction between the State Anatomical Board and the pathological section of the Medical Board of the Philadelphia Hospital, which claims that mutilated bodies have been given to the colleges

VIRGINIA

Dr B Lawrence Taliferro, Richmond, sailed for Europe, May 8, to pursue special studies abroad

Dr Jefferson R Kean, U S A, of Richmond, Va, has received his promotion and is now a major of the medical department in the regular establishment

Dr Buckner M Randolph, Jr, Richmond, who has recently been made dean and director of the laboratory of the Polyclinic Hospital, Philadelphia, has sailed for Europe for a study trip of three months

University College of Medicine, Richmond, Va, held its commencement exercises May 2 and graduated a class of 72 Prof Charles D McIvers, president of the State Normal and Industrial College, Greensboro, delivered the address on "The Best Field for Investment in the South"

The Medical College of Virginia, Richmond, held its sixty third annual commencement exercises, May 9 The graduating class numbered 55 Dr Willis G MacDonald, Albany, N Y, delivered the doctorate address

Dr James B McCaw, one of the oldest physicians in Richmond, on the occasion of his retirement from active practice, issued the following announcement "Dr J B McCaw having arrived at years of discretion, and remembering that he has been a doctor of medicine for fifty seven years, announces to the public that he goes on the retired list on and after this date He would be ungrateful if he did not take this opportunity to return thanks to the good people of this community who have shown their confidence in him and his forefathers for four generations—from 1786 to 1901"

WASHINGTON

Everett Physicians have formed an association to guard against quackery and to establish a uniform schedule of fees

The Sisters' Hospital, built on the line between Fairhaven and Whatcom, was recently opened It contains 48 rooms and 4 wards, and will accommodate about 40 patients It is fitted up with the most modern equipments and is a model of its kind The building as it stands cost about $27,000

Walla Walla Hospital will receive $10,000 under the terms of the will of the late Joseph Conatser, of Colfax, and may receive the entire estate valued at $60,000 to $75,000, in case heirs should not appear The bequest is conditional on the change of name of the hospital to "The Joseph Conatser Walla Walla Hospital

WISCONSIN

Milwaukee Medical College graduated a class of 39, May 1, at its seventh annual commencement

Dr Bruno L Schuster, Milwaukee, has returned from Europe, where he has been studying for some time in Berlin and Budapest

St Elizabeth's Hospital, Appleton, dedicated its new building May 9 The building cost about $75,000, and has a capacity of 75 to 80 beds

Wisconsin College of Physicians and Surgeons—The eighth annual commencement of this college was held at Milwaukee, May 11 A class of 18 received diplomas The doctorate address was delivered by Dr Walter Kempster

Medical College not Exempt—The application of the Milwaukee Medical College to permanently enjoin the City of Milwaukee from collecting taxes, has been denied and the city is taking steps to collect the taxes for 1901, which amount to $1857 36

Compulsory Vaccination Bill Vetoed—Governor La Follette has vetoed the Collins compulsory vaccination bill, as he does not believe an emergency exists which demands a law repugnant to so many good citizens!

WYOMING

Licensed Physicians—The records of the State Board of Health show that Wyoming has 136 licensed physicians

The Quaker Doctor's Suit—A case of more than usual interest to the medical profession was tried at the April term of the district court of Uinta County at Evanston In November, 1899, a traveling representative of the Quaker Medicine Co of Portland, Ore, styling himself "Quaker doctor" was tried before a justice of the peace charged with selling medicines and nostrums While the evidence was conclusive as to

his guilt the justice for reasons best known to himself, dis charged the defendant Several days later he was charged with practicing medicine illegally This second charge was dis missed as the attorney for the defendant convinced the justice that his client was being tried the second time for the same offense As a result of these unsuccessful prosecutions, the so called "Quaker doctor" brought a suit for $20,650 damages against Dr E E Levers of Spring Valley, Wyo, and Drs T L Wicks, C H Solier and F H Harrison, of Evanston, Wyo, charging malicious prosecution The trial developed the fact that these gentlemen were acting only in compliance with the written request of the State Board of Medical Examiners and no motive was shown to have existed It was also clearly demonstrated that the plaintiff was actually practicing medi cine The jury promptly brought in a verdict for the defend ants

CANADA

Smallpox at Hamilton—The disease has appeared at Ham ilton, Ont, where five cases have been located A general vac cination has been ordered

Smallpox at Toronto—Three new cases of smallpox were discovered in Toronto last week Dr Sheard has requested that $5000 be immediately placed at his disposal for meeting emergencies promptly

Doctors' Assessments—The Ontario government has re sponded to the request of several physicians for a test case being submitted to the courts with regard to the validity of the assessment tax of the Medical Council This will stay the hands of the Council until such time as a decision can be ar rived at.

Montreal General Hospital Elections—President, Mr James Cathern, vice president, Mr Harry Stikeman, treas urer, Mr S H Ewing, secretary, Dr F G Finley, physicians Drs W A. Molson A D Blackader F G Finley and H A Lafleur, surgeons Drs F J Shepherd, G E Armstrong, J Alexander Hutchinson and J M Elder

Convocation at Trinity—Convocation exercises were held at Trinity University Toronto, on the afternoon of May 31, when 52 graduates received their degrees in medicine On the following afternoon similar exercises were held at Trinity Medical College when a like number received the diploma of the College and subscribed to the fellowship oath

Smallpox in Winnipeg—On May 24, all the smallpox cases in Winnipeg were recovering and quarantine was raised on that date The patients were removed from the pest house and quarantined in a tent some distance from that place They will be kept there for a fortnight before being permitted to re enter the city On the following day two new cases were discovered in the city, two brothers who had just arrived from Edmonton N W T

Convocation at the Manitoba Medical College—The medical graduates of the Manitoba Medical College received their diplomas on Thursday afternoon May 23 Dr H H Chown, in presenting the graduates, hoped to see the time when a B A. would be the requirements for matriculation, and that the five year course would soon be established in Winnipeg as in eastern Canada Ten were graduated M D's, four, degrees of C M There was a considerable number of unsuccessful candidates

Halifax Board of Health—The Halifax Board of Health held a meeting on the afternoon of May 23 when it was re ported that the city was free from contagious diseases and that there were no patients at the Infectious Disease Hospital Dr Venables wrote the Board in reference to his campaign of vaccination He had recently covered a large territory and had met with great opposition in many quarters In fact, in one section of the city he had received a personal attack in the discharge of his duties

Montreal Foundling Hospital—The annual meeting of this institution was held last week The treasurer's report showed that the receipts for the past year amounted to $6951 and the disbursements to $6762, leaving a balance on hand of $189 The medical report stated that there were in the hos pital on the 15th of May last 36 babies and there had been ad mitted since 137, making a total of 173, or an increase over the previous year of 22 Very nearly one half of the babies admitted were under one week old and of these 31 were under twenty four hours

Western Hospital, Montreal—The annual meeting of this institution was held on May 28 and the reports show that this hospital has just passed through the most successful year in its history The annual report stated that the debt had been reduced in the year from $10,000 to $8000, and this while great improvements had been made in the building, including new operating instruments and anesthetic rooms fitted up with electricity and all other modern appliances As soon as the debt has been completely wiped out it is the intention to en large the building

The Physicians of Three Rivers, Quebec—On May 30, some 43 physicians responded to an invitation to meet in the city of Three Rivers, to organize a district medical association for the advancement of the profession the study of Dr Rod dick's bill and other like measures The meetings will be held monthly, the next being held on June 24 The following of ficers were elected Honorary president, Dr Desaulniers, of Nicolet, honorary vice president, Dr Grenier, of St Maurice, president, Dr L P Normand, first vice president, Dr March and, second vice president, Dr H Trudel, treasurer, Dr J H Leduc, secretary, Dr C E Darche

Sickness in Ottawa—Mr Chancellor Boyd has just issued judgment, given in Toronto, restraining the city of Ottawa from building the new contagious disease hospital on the prop erty of the parks commissioners This may have a serious affect upon the city of Ottawa as at the present time there are said to be numerous cases of infectious diseases in the city and no hospital to which to take them The provincial board of health had condemned the old site at Porter's Island be sides which the buildings there are not fit for use It would look from this judgment as though Ottawa could not establish a permanent hospital for contagious diseases The rules re garding the proximity of other buildings are also very strict in that city and the suburban places object to the presence of a contagious disease hospital in their midst

FOREIGN

At Moscow two new medical scholarships have recently been founded by the widows of two prominent physicians

Plague at Capetown—The total number of cases up to June 9 were 700, with 326 deaths Of these, 119 were white, almost equally divided between colonists and Europeans

Plague at Hong Kong—According to a cable dispatch, the epidemic is increasing The Asiatic cases average 40 daily, and the Europeans 12 The medical staff of the board of health is numerically inefficient

A Moscow physician, according to the *St Petersburg Med Woch*, charged with inoculating three of his patients with syphilis, has been condemned by the courts to six months of im prisonment and loss of all his professional privileges for a cer tain length of time

Plague in India—For the week ending April 27 there were 4093 deaths against 6304 for the week ending April 20 In Bombay the number of deaths was 403, fewer by 56 than in the previous week In the Bombay Presidency the deaths have fallen from 570 to 468, in Calcutta from 389 to 215, and in the Bengal presidency from 3258 to 1707 In the Punjab and Kashmir there has been a slight increase, the figures having risen from 518 to 547 and from 25 to 33 re spectively

Hospitals of Vienna—The City Council has given its ap proval of the improvement of the city hospitals, and contem plates, it is said, the expenditure of a large sum of money therefor This will be in connection with the Wiener Allge meines Krankenhaus The late Professors Billroth and Albert protested against the limited space and the disturbance due to street traffic

French Population Slowly Increases—It is expected that complete official figures of the recent census of France will be published in a few days Paris has a population now of 2,660 000, showing an increase of 149,000 since 1896 The entire country will show only about 500,000 increase in five years This, from a military standpoint shows unfavorably with Germany's increase of 800,000, Austria's 450,000, Eng land's 450,000, and Italy's 400,000, each within a period of twelve months

Beri beri in Japan—In 1883, the last year of the old sys tem of diet there were 1236 cases out of a force of 5346 men in the navy or a ratio of 231 per 1000 of force, the deaths were 49 In 1898 the number of cases was 16 out of a total of 18 426, the mortality was one Now, by a judicious system of diet beri beri may be regarded as driven out of the navy

altogether The daily food of a man in the Japanese navy is now approximately one half pound of bread two thirds of a pound of meat, two thirds of a pound of rice, five sixteenths of a pound of vegetables, plus small quantities of fish, tea, sugar, roasted barley, etc The average weight has increased from 121 pounds, approximately, in 1884, to 130 pounds in 1988

Recrudescence of Diphtheria in Paris—The number of cases amounted to 1262, with 225 deaths during the first four months of 1901, while there were only 563 cases, with 121 deaths, during the same period last year The Minister of the Interior has issued an order that physicians should not wait to obtain fresh antidiphtheria serum, but inject at once some of the obtainable supply When the injection is made the day the false membranes first appear, the mortality of diphtheria, he states, is less than 2 per cent It is 6 per cent when the injection is made the second day, and rises to 30 per cent when the injection is delayed till the third day and to 50 and 60 per cent the fourth day and thereafter Some of our Paris exchanges comment on this "Compulsory Serum Treatment' as a measure more autocratic than a despot would dare to promulgate, but the *Progrès Médical* approves of the motive inspiring it

PARIS LETTER

Cocain in Maternity Cases

Cocain in maternity cases has been tried by several accoucheurs in Paris Doleris, who is well known to gynecologists in America, has been employing it in his service at the Boucicaut Hospital The number of cases reported in the thesis of his assistant, Dr Malartic is 62 The usual dose was one centigram sometimes two The results were good in 52 cases, and bad in 10 Dr Malartic established the following conclusions Analgesia lasts about two hours, the uterine contraction is excited, especially immediately after the injection, retractility is also induced, there is a certain hemostatic action, and lastly a slight degree of action on the contractions even outside parturition As a result of this intramedullar cocainization is the best anesthetic in all obstetric operations, with the exception of version It is counterindicated in cases of pregnancy on account of its abortive influence It may be used in cases of parturition where there is much pain, as a hemostatic as a means of inducing labor for instance in eclampsia Dr Doleris used this method in a case necessitating Cesarean section, and the action on the uterus was so pronounced that it was not necessary to check the bleeding after extraction of the child, as is usually done, by compression at the neck of the uterus

Mortality Among Parisian Physicians

The statistics concerning the number of deaths of the medical body in Paris are published every three months and they tend to show that a large proportion of them are due to diseases contracted in the profession Out of 71 deaths 38 are due to consumption and kindred affections Out of 14 physicians 3 died of diabetes and two committed suicide, one died from morphinomania

Novel Will Tending to Improve Race

The recent laws concerning marriage which have been proposed in Indiana and Minnesota have been outdone by the terms of a will made a few months ago by Count Saint Ouen de Pierrecourt, an inhabitant of Rouen, who has left his estate to the town under the following conditions Every year $20,000 will be given to a married couple who will be chosen for their size and strength The man and his wife will have to be examined by the physicians of the town, and the latter will report as to their condition

Remarkable Case of Deception

There has been a good deal written recently in the French newspapers about a young woman at St Germain who had needles coming out from different parts of her body She said that she had swallowed a package of needles some five years ago, and they were only just beginning to come The physician and the druggist had already removed 50 needles, when some one told her that the pricking of the skin would be the cause of serious *inflammation* The phenomenon stopped very soon after, and as the needles were always found on the left side and always came out by the blunt end, it was shown that she had been practicing deception

Invention of the Stethoscope by Laennec

In the last number of the *Chronique Médicale* the manner in which the stethoscope was discovered is described by Dr Gorgon Laennec, who was always very punctilious about examining young women, was taking care of a girl 18 years old who had some lung affection One day he was going to see his patient and was crossing the court of the Louvre, where some children were playing about some long timbers and striking them so that others at the other end might hear the knock Laennec was holding in his hand a roll of papers The idea came to him to use it in like manner while examining his patient He later found it more advantageous to use a solid piece of wood, which was ultimately transformed and became the modern stethoscope Most French physicians auscult directly without any instrument, but they use the stethoscope for certain heart lesions The double stethoscope which is employed in England and America is rarely seen in France

Sanatoria for Consumptives

Sanatoria for tuberculous patients are not common as yet in France There are a few established in the southern part of France, but they are more for wealthy patients and we do not see in France what has been established in Germany during the last four years, sanatoria for workmen where the expenses are only three marks a day There are already 43 sanatoria of this type in Germany and 19 more will be finished in 1902 This number will be ultimately increased A fact worthy of notice is that these sanatoria are built by the state, as an outcome of the insurance made by law in the case of certain laborers It is useless counting upon private charity to find the necessary funds to build the sanatoria that will be found necessary Another point is that whereas in Germany the cost of construction and the money needed to run such establishments seem to be comparatively small, in France the amounts indicated are very large A recent estimate would place the cost of construction of sanatoria for 300,000 consumptives at 1 800,000,000 francs, and the annual expense would be 328,000,000 francs According to the German estimate it would be respectively 200,000,000 and 70,000 000 There is a new law under discussion in the Chamber of Deputies concerning the establishment of a pension for workmen, arrived at a certain age, and the passing of this law might lead to establishing sanatoria as a means of prolonging the time during which a workman can accomplish his work

Laveran Elected Member of the Institute

One of the highest honors that a physician can obtain in France is to be made a member of the Academy of Sciences, one may say that the life of a physician is made up of the following positions, which he is destined to occupy in succession Medical student, externe, then interne of the hospitals physician of the hospitals, professor agrégé of the Faculty of Medicine, member of the Academy of Medicine, and lastly member of the Institute A place was vacant on account of the death of Professor Potain and on May 20 an election took place Dr Laveran who is so well known for his works on malaria, got 40 votes and Professor Richet 15

LONDON LETTER

The Polyclinic Dinner

The annual festival dinner of the Medical Graduates' College and Polyclinic has been a most successful function, and by far the most important medico social event of the year Mr A J Balfour, M P, first lord of the treasury, presided, and was supported by many distinguished persons, including the Duke of Marlborough Lord Kelvin Sir William Broadbent (president of the Polyclinic), Mr Jonathan Hutchinson Sir William Gowers Sir Lauder Brunton, the Lord Mayor, and the Bishop of London About 400 physicians were present Mr Balfour proposed the toast of the Polyclinic in an excellent speech In describing the need for such an institution and the position of medical science in this country he showed a command of the subject which might be envied by any medical speaker He pointed out that there were three sides to the activity and utility of the Polyclinic First it supplies medical advice of the highest kind to persons who could not otherwise obtain it Vast sections of the population availed themselves of the services of the general practitioner In cases of difficulty in which he would recommend them to go to some consultant they were not able to do so because they had not the resources This was a want which was not supplied by the hospitals but was supplied by the Polyclinic But this was not the form of its activity which he thought would produce the most far reaching benefits to mankind It enabled the hard worked general practitioner to make himself familiar with the latest researches in medical science—a matter hitherto impossible It gave these men on the easiest and cheapest terms an opportunity of keeping abreast with the times and coming into personal contact

with the leaders of medical thought There was yet a third branch of the activity of the Polyclinic—furthering the growth of medical knowledge Although this country could claim the credit of the discovery of anesthesia and of the antiseptic system it could not be said that, compared with Germany, France, or Italy, it had done all that it might have done as a pioneer of medical discovery For that the unprofessional and unscientific public were partly to blame The richest country in the world lagged behind Germany, France and Italy Mr Balfour concluded his eloquent speech with a plea for the support of the Polyclinic The toast was drank with enthusiasm Sir William Broadbent said, in responding, that the Polyclinic was only the embryo of what it hoped to become in the advancement of medical science and investigation Mr Jonathan Hutchinson also responded and referred to the unique collection of photographs and illustrations of disease which were being accumulated at the Polyclinic and would in part supply the place of an hospital in the instruction of its members The immediate result of the banquet was a subscription list of $8000 in aid of the support of the institution

The Annual Report of the Local Government Board

The supplement to the annual report of the Local Government Board has just been issued It opens with a fitting tribute to the great public services of the late Sir Richard Thorne by whose untimely death the board have lost an administrator of the highest order, and with a like reference to the late Dr Robert Cory for many years director of the board's animal vaccine establishment Mr Power, whose skill and acumen were conspicuously displayed some years ago by his discovery of the agency of milk in the conveyance of scarlatina and diphtheria has succeeded Sir Richard Thorne as chief medical officer From the summary of the departmental work which is given, it is evident that the increase in vaccination which is believed to have followed recent legislation did not commence too soon for the safety of the country The statistics now given apply only to 1897, in which the amount of default is greater than has ever been recorded Of 927,518 children born in the year only 62 4 per cent were returned as successfully vaccinated, 11 2 per cent as having died unvaccinated, 0 3 per cent as insusceptible and 3 4 per cent as exempted under certificates of "conscientious objection," according to the act of 1898 The demand for glycerinated calf lymph is now continuously increasing

Intestinal Intoxication from Appendicitis

At the Royal Medical and Chirurgical Society Dr Sidney Martin described the case of a man aged 50 whose motions were offensive and never solid After eight weeks there were pallor, cachexia, emaciation and flabby muscles There were daily from one to three extremely offensive, liquid motions No cause could be discovered for the intestinal decomposition The colon was flushed with boric solution, but the patient continued to lose flesh (11 pounds in 15 days), and his condition became desperate The right deep inguinal glands were enlarged At one examination a mass was felt in the right loin, and it was decided to explore the abdomen The mass was found to be the kidney which the emaciation had made readily palpable The cecum was thickened and the appendix enlarged and there were calcereous glands between the ileum and cecum The appendix and glands were removed The appendix was enormously thickened and its mucous membrane showed two small erosions The contents were extremely fetid The appendix was considered the origin of the patient's condition Gradual recovery followed Seven months after operation the bowels were loose only occasionally and there was no fetor The glandular enlargement disappeared rapidly after the operation and might be considered part of the intoxication process As far as could be discovered there was no bacterial infection Mr R J Godlee, in commenting on the surgical aspect of the case said that enlargement of the inguinal glands in association with appendicitis was a new fact in his experience

The Pathological Society

Certain alterations in the mode of work of the society have been adopted In future the work will be carried on in four sections with sectional chairmen and secretaries Section A (pathological anatomy and histology) will have as chairman Dr J F Payne, Section B (bacteriology), Dr Klein, F R S, Section C (experimental pathology), Dr F W Pavy F R S, Section D (chemical pathology), Prof Halliburton, F R S The members of the council have been arranged in a corresponding manner in committees for the several sections This alteration in the mode of conducting the business of the society has been necessitated by the great extension of the field of pathology since the society was founded in 1846 It will no doubt greatly conduce to the utility of the society, which has done such excellent work in the past, by keeping together all who are working at the different branches of pathology

Correspondence

"A New Operative Method for Exposing the Seminal Vesicles and Prostate for Extirpation"

TOLEDO, OHIO, June 4, 1901

To the Editor —In the May 4 issue of THE JOURNAL my attention has been called to an article by Dr Eugene Fuller, of New York on the subject of "A New Operative Method for Exposing the Seminal Vesicles and Prostate for Extirpation" Inasmuch as Dr Fuller's assumptions are based upon work which originated, so far as I have any definite information, with myself more than nine years ago, and was published in the *New York Medical Record*, Aug 6 1892, I feel that he has done me an injustice to publish a report of "a new method" wherein he describes an operation exactly like my own, with the unimportant change of the patient from the dorsal to the ventral decubitus Does changing a patient from the dorsal to the ventral position give an operator the right to lay claim to all the work that has preceded him in that direction? It appears that Dr Fuller has taken this position In Dr. Fuller's "new method" his paper is illustrated showing the ventral position of the patient and the line of incision which covers the field external to the anal sphincters and internal to the pelvic rami, the two lines along the rami being connected by a transverse incision immediately in front of the anal sphincters and behind the transversus perinei Dr Fuller says of this space, that it gives easy access to the prostate and seminal vesicles and is devoid of necessary hemorrhage, there being no vessels to ligate In my article in the *New York Medical Record* of Aug 6, 1892, I use the following words in the description of my operation "The space immediately in front of the rectum and behind the bulb of the urethra was chosen as the route to reach the base of the bladder and the prostate The transverse diameter of the outlet of the pelvis at this point is too short to work in, and consequently, it behooved me to increase the operating space without doing injury to important structures I accomplished this by making a semicircular incision, as is shown in the illustration, from a point midway between the tuber ischii around the anus and entirely within the connective tissue between the bulb of the urethra and the rectum The advantage of this is that it gives the widest possible diameter of the pelvic outlet with no hemorrhage to speak of, and an easy access to the field of operation No spurting vessels need be divided, inasmuch as they lie to the outside and in front of the incision" In the *Philadelphia Medical Journal*, April 1, 1899, I further elaborated the anatomical surroundings, and it would seem impossible for Dr Fuller not to see that he was pursuing the same description and making the same claims that I had already made The photographic illustrations which accompanied my articles to the *New York Medical Record* and the *Philadelphia Medical Journal*, with the descriptions therein given, evidences the similarity of Dr Fuller's operation with that of my own

Respectfully, JOHN S PYLE, M D

Decinormal, not Normal, Salt Solution in General Use

PALMER, NEB, June 4, 1901

To the Editor —In a recent issue of THE JOURNAL the writer noticed the question as to how much salt to put in a quart of water to make the normal solution extemporaneously The answer given was to take a small teaspoonful to the pint This answer is, of course, correct for the purpose intended However, it makes the decinormal, and not the normal solution A normal solution is almost exactly two ounces (avoirdupois) of common salt (NaCl) in a quart of water

A normal solution contains as many grams of the drug per liter of menstruum as there are units in the molecular weight of the drug taken for univalent substances or substances combining with one atom of hydrogen For instance 23 (the combining weight of Na) added to 35 4 (the combining weight of Cl) equals 58 4, the number of grams for a liter of water This makes 899 grains salt to be put into 33 ounces and 6 5 drams water (liquid measure) This, of course, is too strong even for analytic chemistry, so that only one tenth of the amount of salt is taken per liter of water

From this it appears that 90 grains (89 9) is nearly correct for a quart of water, to make even the decinormal solution It is the decinormal salt solution that is used for intravenous injection or subcutaneous transfusion and not the normal solution at all

C S MINNICH, M D

Surgery in Exophthalmic Goiter

COLUMBUS, OHIO, May 27, 1901

In response to the suggestion in the Editorial on the above subject in the issue of THE JOURNAL of May 25, 1901, I report briefly the following case

Mrs P, Dennison, Ohio, aged 34, mother of two children, youngest of which is aged 6, was suffering with a retroverted and adherent uterus, with prolapse of the right ovary She had a well-marked goiter, with a pulse of 132 Exophthalmos was noticeable, but not pronounced She had been having this condition of the goiter and heart for a year or more, but the symptoms seemed stationary Operation was made Nov 20, 1898 in the presence of Drs S L McCurdy of Pittsburg and C U Patterson of Uhrichsville, Ohio The operation consisted in separating the adhesions and making an ordinary ventral suspension The patient stood the operation well and suffered no ill effects afterward Her pulse on the second day reached 140, but soon dropped to its usual frequency, and so continued until she left the hospital I understand that her symptoms of exophthalmic goiter still remain about as they were at the time of her operation This is my only experience in operating in this disease In the case referred to in your editorial the connection between the exophthalmic goiter and the fatal issue is, to my mind, by no means clear

J F BALDWIN, M D

The Monument to Dr Ollier

PHILADELPHIA, June 3, 1901

To the Editor —Some time since you kindly published an appeal of a committee soliciting subscriptions for a monument to the late Professor Ollier in Lyons As treasurer of the committee, I beg to inform the profession that I have received the sum of $649 from 103 subscribers I have forwarded the same, less $4 60 for postage, printing, etc, to Dr G Mondan, 27 rue Jarente, Lyons, France

Yours very truly,

W W KEEN, Chairman

Professor Freund —Professor W A Freund, of Strassburg, recently resigned his chair to retire from active professional duties He facetiously observed in his farewell address to the students that the physician nowadays is like the camel in the fable whose back was broken by the proverbial last straw The profession is the cruel master whose back was broken by the proverbial last straw The profession is the cruel master that loads him down with a constantly increasing burden of new anatomic, microscopic, chemical and photographic techniques, new methods of diagnosis, new bacteria and toxins, new antitoxins and new methods of sterilizing the hands The last straw is the wearing of hoods and masks to operate in "Instead of staggering under this daily growing load until my back breaks," he remarked, "I prefer to be like the horses of the watering carts, who start out with heavy loads, but find their task constantly growing lighter"

Association News

AMERICAN MEDICAL ASSOCIATION

Fifty Second Annual Meeting, held at St Paul, Minnesota, June 4 7, 1901

OFFICIAL REPORT OF THE GENERAL SESSIONS

JUNE 6—THIRD GENERAL SESSION

The Association met at 11 a m, and was called to order by the President

The minutes of the previous General Session were read by the Secretary and approved

Before proceeding with the regular order of business, the President stated that he had arranged with the Committee of Arrangements to allow 10 minutes for the presentation of a memorial, with remarks by the representatives of the National American Woman's Suffrage Association relative to certain questions of sanitation in the Army

President Reed then introduced Miss Susan B Anthony, who spoke briefly on the subject of regulating vice in Manila Hawaii, and Porto Rico, the new possessions of the United States

Miss Anthony was followed by the Rev Anna Shaw, who spoke of the memorial that had been passed at the thirty third annual convention of the National American Woman's Suffrage Association, held May 30 to June 5, 1901 She outlined the principal features of the memorial, and expressed the hope that some action might be taken by the Association in regard to the regulation of vice in our new possessions

Dr Seaman, New York, asked for two minutes of the time of the Association in which to point out the actual condition of affairs in regard to the prevalence and control of vice in China and elsewhere This time was granted, and Dr Seaman read extracts from a paper which he had presented before the recent meeting of the military surgeons of the United States

Dr McCormack, Kentucky, offered the following resolution as supplementary to the work of the Committee on Reorganization relating to state and county societies

Resolved, That this Association cordially endorses the plan proposed by the Committee on Reorganization for a uniform system of organization of state and county societies in affiliation with this body, and the Secretary is hereby instructed to correspond with the officers of each state society and urge the adoption of such plan in so far as it may be applicable to their conditions, and that he shall report to the next annual meeting the result of such correspondence

On motion, the resolution was adopted

Dr Gould, Pennsylvania, offered the following resolution

WHEREAS, at the last meeting of this Association an appropriation of $150 was made to pay the expenses of the Committee on Reorganization, and

WHEREAS, the actual expenses incurred by the members of this Committee in the performance of its duties amounts in the aggregate to nearly $400, therefore, be it

Resolved, That the Board of Trustees be authorized to pay such properly attested bills of expenses not to exceed the sum of $400 above named

On motion, the resolution was adopted

The President announced as the Committee on National Legislation Drs H L E Johnson, of Washington, D C, William L Rodman, of Philadelphia, and William H Welch, of Baltimore

The President said that in the new Constitution and By Laws the words "Session" and "Meeting" were used in such a manner as to create confusion After quoting from Robert's Rules of Order the correct use of these terms, he stated that unless the Association ordered otherwise, he would direct the Committee on Engrossing the Constitution and By Laws to rectify the matter

There being no objection, it was so ordered

Dr Bulkley read the report of the General Executive Committee of June 5, which, on motion was adopted

Report of General Executive Committee

The General Executive Committee begs to reports as follows

The Committee met yesterday afternoon at 3 o clock, thirty members being present, in conjunction with the Committee on Reorganization The Committee remained in session till 6 30 p m

As there were many matters in the President's Address requiring careful consideration, no action was taken upon it except to refer it to a sub committee who will report to day and the General Executive Committee will report upon same, after full discussion, to morrow

The report of the secretary, which was referred to the Executive Committee, was considered and the recommendations contained therein were adopted for recommendation to the Association

The representatives of the Section on Physiology and Dietetics and that on Pathology and Bacteriology reported that their Sections had each requested by vote that the two Sections should be combined into one section under the title of Section on Physiology and Pathology, in order that the scientific work relating to these branches might be considered together, they reporting also that the attendance on each Section was so small that it was desirable to consolidate the two After discussion and inquiring from members of the executive committee of each Section, who were present the General Executive Committee finally resolved to request the Association that the proposed change or merging of the two Sections into one section be adopted by the Association

J DUNCAN BULKLEY, M D, Secretary

Dr Bulkley read the report of the General Executive Committee of June 6 on matters that had been referred to it

Report of General Executive Committee

The General Executive Committee begs to report as follows

1 The President's Address has been carefully considered and the Committee respectfully submits for your consideration the following recommendations made by him with their endorsement

REPORT OF COMMITTEE ON PRESIDENT'S ADDRESS

The Committee on the President's address respectfully submit for your consideration the following recommendations

1 That the admirable address of our President Charles A L Reed be published in full in an early issue of THE JOURNAL of the Association

2 That the Association appoint a Committee to draft appropriate resolutions commemorative of the lives and distinguished services of Alfred Stillé Lewis A Sayre and Hunter McGuire, recently deceased Presidents of the Association, and that resolutions adopted be published in THE JOURNAL, and engrossed copies of the same be tendered to the nearest living relative, respectively, of these distinguished men

3 That action be taken to secure suitable portraits of deceased ex Presidents of the Association

4 That the incorporation of the Association be confirmed

5 That a Committee of three be appointed to revise the Code of Ethics with instructions to report at the next annual session of the Association and that a printed report of their revision be published in THE JOURNAL of the Association not later than April 1, 1902

6 That the Association pass resolutions of disapproval of the action of Congress in failing to pass the bill which provided for the proper and adequate recognition of the medical corps of the United States army * * *

2 In regard to the request from the Committee on Scientific Research signed by Dr William H Welch chairman the Executive Committee recommends to the Association that the sum of $500 appropriated for this Committee last year and not expended be used by that Committee this year in place of further appropriation of $500

3 A communication from Dr Arthur MacDonald in regard to the establishment of a Psycho Physical Laboratory in the Department of the Interior at Washington was received by the Committee and fully discussed They would recommend that the following resolution be adopted with reference to the same

Resolved, That we are in favor of the establishment of a Psycho Physical Laboratory in the Department of the Interior at Washington for the practical application of Physiological Psychology to Sociological and Abnormal Pathological data, especially as found in institutions for the criminal, pauper and defective classes and in hospitals and also as may be observed in schools and other institutions

4 The report of Committee on Legislation was considered and the following recommendations contained therein are endorsed by your Committee for adoption (See report)

5 The Section on Pathology and Physiology having requested the Committee to consider their work, your Committee begs to recommend to the Association that the appropriation of $500 for the Pathologic exhibit be continued for the following year, as your Committee believes this to be an extremely valuable portion of the educational work carried on by this Association

6 Your Committee begs leave to call attention of the Sections to the necessity of each electing two delegates for the House of Delegates for the coming annual session

It was moved that the report be adopted as read Seconded

Dr H Bert Ellis, California, suggested that the name of Dr R Beverly Cole, California, be added to the list of deceased presidents, and it was so ordered

Dr Happel, Tennessee, said he understood that there was a provision in the report of the Committee on President's Address which involved the appointment of a Committee to revise the Code of Ethics He did not wish to make a motion to table that part of the report, for the reason it might carry with it the possibility of tabling the entire report He therefore asked that this section of the report be considered and acted upon separately Accordingly he made the following motion

"I move as an amendment to the motion that the report be adopted as a whole, save and excepting the appointment of a Committee to revise the Code of Ethics, and that this section be left for action until all the other sections are disposed of" Seconded

Dr Allen, of New Jersey, moved as an amendment to the amendment, that each section of the report be read and acted upon separately Seconded

The original motion as amended was carried

Dr Bulkley then read the report of the General Executive Committee section by section, all of which were adopted with the exception of Section 5, which relates to the revision of the Code of Ethics

After the reading of Section 5, namely, "That a Committee of three be appointed to revise the Code of Ethics, with instructions to report at the next annual session of the Association, and that a printed report of their revision be published in THE JOURNAL of the Association not later than April 1, 1902"

Dr Reynolds, of Kentucky, moved that this section be laid on the table Seconded

Dr Happel, Tennessee, rose to a point of order, and stated that no one had a right to vote on the Sections of this report who was not a delegate He therefore demanded the call of the roll of delegates

After some discussion, Dr Bishop, Pennsylvania, moved that the roll call be postponed until the next annual session

The President put this motion, and it was carried amid laughter

Dr N S Davis, Jr, of Chicago, was then introduced, and delivered the Oration in Medicine (See p 1606)

On motion of Dr Ellis California a vote of thanks was extended to Dr Davis for his interesting address

The Secretary read the report of the Nominating Committee (See THE JOURNAL, p 1649)

Dr Harris of New York, moved that the report of the Nominating Committee be adopted Carried

Dr Tuckerman, of Ohio, offered an amendment to the By Laws

"Section 3 Committee on Legislation The Committee on Legislation shall consist of three members appointed by the President of the Association for a term of three years One member shall be a resident of Washington, D C, one of Baltimore, and one of Philadelphia It shall be the duty of the Committee to represent before Congress the wishes of this Association regarding any proposed legislation that in any re

spect bears upon the promotion and preservation of the public health or upon the material or moral welfare of the medical profession This Committee shall also invite to a conference once a year or oftener if need be, one delegate each from the medical service of the United States army the United States navy and the Marine Hospital Service, one from the Bureau of Animal Industry, and one from each affiliated state or territorial medical society such conference to meet in Washington to consider questions of medical and sanitary legislation, and to report back to this Association and to the several state and territorial societies" (Referred to the House of Delegates)

Dr W K Sheddan, Tennessee, offered the following resolution, which was referred to the Board of Trustees

"*Resolved*, That in view of the long and faithful services of Dr W B Atkinson, as Secretary of the American Medical Association, the Trustees be directed to defray the railroad expenses of Dr Atkinson individually, to and from each future meeting of the Association and that he be released from duty on the Registration Committee"

Proposed emendment to By Laws, Chapter IX, Section 7, as follows Strike out the following words of Section 7, Chapter IX "reprints and transactions of Sections, including its lists of members, its rules of order, its lists of officers, as now published shall be paid for out of the funds of the Association, and furnished free to members of the Association"

JUNE 7—FOURTH GENERAL SESSION

The Association met at 11 a m and was called to order by the President

Before beginning the regular order, the President made the following statement "Some confusion exists relative to the exact status of the Association under the reorganization That there may be no misunderstanding upon this important subject the Chair begs to explain and now rules that

"1 The reorganization is in fact the original organization under and in pursuance of the articles of incorporation which were ratified by the Association for the first time by and in the adoption of the new Constitution

"2 The new Constitution goes into effect during the present session only so far as applies to the election of delegates by the respective Sections as defined by the new Constitution All other business is conducted in accordance with the old Constitution

"3 All standing committees, and all special committees created by the General Meetings of the present session shall report next year to the House of Delegates

"If there are no objections, these rulings of the Chair shall stand as the sense of the Association As there are no objections the foregoing rulings are directed to be recorded as the sense of the Association"

The Secretary read the minutes of the previous General Session which were approved

Dr George M Kober, of Washington, D C, was introduced and delivered the Oration in State Medicine (See p 1617)

At the close of the Oration the President extended a vote of thanks to Dr Kober in behalf of the Association for his splendid address

The next order was the appointment of delegates to other societies The President stated that only one name had been handed in, that of Dr Judson Daland whom he appointed as a delegate to represent the American Medical Association at the World's Tuberculosis Congress to be held in London, England, July 22 of this year He said other names would be added to the list by the Secretary as they were handed in

Dr L Duncan Bulkley then read the report of the General Executive Committee

Report of General Executive Committee

The General Executive Committee begs to report that no business was referred to it by the Association, and but one matter was acted upon, namely, the following resolutions presented by the Section on Pathology and Bacteriology, which are recommended to the General Session with the endorsemnt of the General Executive Committee

The Section on Pathology and Bacteriology of the American Medical Association presents the following resolutions

WHEREAS, Mr John D Rockefeller, of New York, appreciating the great importance and humanitarian utility of pure scientific medical research, has recently donated the sum of $200,000 for the promotion of original investigation, and has placed the control of this sum in the hands of a committee composed of representative medical scientists under the able chairmanship of Professor William H Welch, of Baltimore, be it

Resolved, That the medical profession, represented by the American Medical Association, desires to express its profound appreciation of this generous gift and of the gratifying fact that the importance and needs of scientific research in medicine are so clearly realized by the donor, also its appreciation of the wise selection of the chairman of the committee having charge of the same Be it further

Resolved, That the Secretary of the American Medical Association be instructed to transmit a copy of these resolutions to Mr Rockefeller

It was moved that the report be adopted Carried

The next in order was the report of the Judicial Council, which was read by Dr F H Wiggin, New York, as follows

Report of Judicial Council

The Judicial Council met at 5 p m, in Parlor 4, at the Hotel Ryan, Dr H D Didama, and F H Wiggin, both of New York, being present Dr Wiggin was appointed acting secretary by the Chairman, Dr Didama, and the meeting was adjourned till 5 p m, June 6

FREDERICK HOLME WIGGIN, Acting Secretary

The adjourned meeting of the Judicial Council was called to order by the Chairman, and on motion Dr C S Rodman, of Connecticut, was elected Chairman and Dr F H Wiggin, of New York, Secretary for the ensuing year

The request of the New York State Medical Association that the name of a member, of New York City, be dropped from the roll of members of this Association and the protest of the member against such action were considered, and as it appeared that his name had been dropped from the roll of members of the New York State Medical Association for non payment of his dues for the years 1898 1899 and 1900, his name was ordered to be dropped from the roll of members of the Association in accordance with the By Laws, until all such arrears of membership have been paid up and he has been reinstated to membership by his local society and the Secretary so notified

The request of the Jackson County Missouri Medical Society that the name of a member, of Karsas City, Missouri, be dropped from the roll of members of the American Medical Association because he is not a member of a local society in affiliation was granted, and his name was ordered stricken from the roll of members

The secretary was also ordered to drop from the roll of members the name of a member of Elkhart, Ind, as he has ceased to be a member of his local affiliated society The Council having decided that a member of this Association forfeits his membership when he ceases to be a member of a local affiliated society either county or state where one exists

The Secretary of the Association, having called the attention of the Council to the fact that there are at the present time on the roll of members of the Association the names of men who, having obtained their membership from an affiliated association, have removed their residence to another county or state and have not joined the local affiliated society in the place of their new residence The Secretary was ordered to inform such gentlemen that they were acting in violation of the By Laws of this Association relating to membership, and that he request them to at once obtain membership in an affiliated society in the place of their legal residence and in default of this within a reasonable time to drop their names from the roll of members

The Secretary having asked for an interpretation by the Council of the following sentence in the By Laws relating to membership, to wit "Nor shall any person not a member of a local medical society" It was decided that this clause be con

sidered to mean a local affiliated society in the county or state in which the applicant resides

The Council, while wishing the full details of this report entered in the minute book, suggests that in publishing it in THE JOURNAL that the names of the individuals mentioned in it be omitted

FREDERICK HOLME WIGGIN, Secretary

Report of Committee on National Legislation

Your Committee on National Legislation, to whom was referred the following resolutions from the National Association of Military Surgeons, presented to your honorable body by Major Louis L Seaman, U S V

Resolved, That this body deplores the action of Congress in abolishing the Army Post Exchange or Canteen, and, in the interests of discipline, morality and sanitation, recommends its re establishment at the earliest possible date"

We have carefully considered the resolution proposed and declare it to be wise and proper, and of importance to every citizen of this republic

The resolution is the outgrowth of careful study and observation by the medical department of the United States Army, is concurred in by the commanding officers at the several posts, and is intended to correct serious abuses under the present law, which result in drunkenness, desertion, insubordination, dishonorable discharge, crime, poverty, appalling increase in venereal disease and invalidism among the soldiers of the United States Army

We find that the experience of foreign governments coincides with that of the National Association of Military Surgeons in the necessity for the Army Post Exchange or Canteen

We recommend that the American Medical Association adopt the resolution proposed and that you petition the Congress of the United States to repeal at the earliest moment, the objectionable law which prohibits the Army Post Exchange

Respectfully submitted

H L E JOHNSON,
Chairman Committee on National Legislation
WM L. RODMAN

On motion of Dr Lewis Chicago, the report was adopted

The President appointed Drs McGruder and Marcy to escort the President elect to the platform

Dr Wyeth, the newly elected President, was then introduced and made a brief speech in which he thanked the Association for the distinguished honor conferred upon him

Dr Seaman, New York moved that a vote of thanks be extended to the retiring officers for the admirable, excellent and satisfactory Meeting also to the Chairman and members of the Committee on Arrangements and the citizens of St Paul who had done so much to entertain the Association

Dr Marcy, Boston put the motion and it was carried unanimously by a rising vote

There being no further business to come before the General Session Dr Reed declared the Association adjourned *sine die*

OFFICIAL MINUTES OF THE SECTIONS

Section on Practice of Medicine

TUESDAY JUNE 4—AFTERNOON SESSION

The regular work of the Section on Practice of Medicine commenced with the Address of the Chairman Dr J M Anders of Philadelphia Dr John B Deaver of Philadelphia read a paper on Appendicitis Pathological Anatomy Diagnosis and Treatment It was discussed by Drs De Lancey Rochester of Buffalo J B Kelly of Philadelphia Frank D Smythe of Memphis J A Witherspoon of Nashville Boardman Reed of Philadelphia I N Love of New York City William Bailey, of Louisville C W Lilly of East St Louis Ill H S McConnell of Mechanicsburg Pa Frank Warner of Columbus A F House of Cleveland C A. Kelsey of Indianapolis W Finlay of Altoona Pa. George F Jenkins of Keokuk Iowa J M Spellman of Anaconda Mont W H Christie of Omaha Jno A Boager of Philadelphia and F L Herriot of Jacksonville Ill

A paper on Some Phases of Malaria was read by J B McElroy of Stovall Miss It was discussed by Drs E H Martin of Clarksdale Miss Wm Britt Burns and D M Hall of Memphis De Lancey Rochester of Buffalo W G Harrison of Talladega Ala Victor C Vaughan of Ann Arbor G W Young of Breckenridge Mo Louis Schwab of Cincinnati Joseph Brayshaw of Illinois T B Fütcher of Baltimore and A. D Hains of Cincinnati

WEDNESDAY JUNE 5—MORNING SESSION

The Chemical and Microscopic Value of Blood Examinations was read by W D Kelly of St Paul Pernicious Anemia Report of a Series of Cases by Thomas McCrae of Baltimore and The Leucocyte Count in Hemorrhage by George Douglas Head of Minneapolis These three papers were discussed by Drs De Lancey Rochester of Buffalo W B La Force of Ottumwa, Iowa Thomas McCrae of Baltimore George Douglas Head, of Minneapolis W T Higgins of Courtland N Y A J Coy, of Chicago W D Kelly (closing discussion) Thomas McCrae (closing discussion) and George Douglas Head (closing)

Osmotic Pressure and its Relation to Uremic Manifestations was read by Heinrich Stern of New York City

WEDNESDAY, JUNE 5—AFTERNOON SESSION

The Chairman announced the Nominating Committee as follows J B Herrick, of Chicago chairman C H Hunter of Mississippi and James J Walsh of New York City This committee reported for chairman Frank A Jones of Memphis for secretary, Robert B Preble of Chicago

A paper on 'Cirrhosis with Pigmentation was read by T B Fütcher of Baltimore on 'Circulatory Disturbances Accompanying Cirrhosis with Inosculation of the Portal Branches with Systemic Veins by Charles G Stockton of Buffalo on 'Cirrhoses of the Liver Due to Metallic Poisons by Victor C Vaughan of Ann Arbor on Treatment of Cirrhoses of the Liver by J H Musser of Philadelphia These papers were discussed by Drs Frank Billings of Chicago J B Herrick of Chicago W E Quine of Chicago William Bailey of Louisville Ky O T Osborne of New Haven Conn Robert B Preble of Chicago G W McCaskey of Fort Wayne Ind Clarke Gapen of Madison, Wis G W Webster of Chicago W H Neilsen of Milwaukee C G Stockton (closing) T B Fütcher (closing) and V C Vaughan (closing)

A paper on Rheumatic Stimulants was read by James J Walsh of New York City, and discussed by Charles G Stockton, of Buffalo G W Webster of Chicago C H Hunter of Minneapolis

Charles Lyman Greene of St Paul, read Akromegaly Present ing Features of Interest"

THURSDAY, JUNE 6—MORNING SESSION

The morning work was opened by a paper on 'Modified Treatment of Typhoid Fever' by T B Greenley of Meadow Lawn, Ky and on Medical Shock' by O T Osborne of New Haven Conn Discussed by Drs W C Lillie of East St Louis Ill James J Walsh of New York City C A Kelsey of Minneapolis Geo W Webster of Chicago R C Newton of Monclair N J and O T Osborne (closing)

"The Spread of Tuberculosis by Coughing" was read by E Napoleon Boston of Philadelphia Practical Value of Cultures from the Throat' by H M Fussell of Philadelphia (Read by Dr G W Webster) These papers were discussed by Drs De Lancey Rochester of Buffalo R C Newton of Montclair N J C W Lillie of East St Louis Ill

Genito Urinary Examinations by the General Practitioner With Demonstrations on Patient' Ferd C Valentine of New York City

THURSDAY JUNE 6—AFTERNOON SESSION

The afternoon's work opened with an interesting Symposium on Pericarditis consisting of papers on Clinical Observations in Pericarditis by Frank Billings of Chicago 'Pathology and Pathogenesis of Pericarditis" by Joseph McFarland of Philadelphia The General Etiology of Pericarditis" by Robert B Preble of Chicago Relation of Pericarditis to Endocarditis and Myocarditis by Alfred Stengel of Philadelphia 'Adherent Pericardium by Robert H Babcock of Chicago Tuberculous Pericarditis by C F McGahan of Aiken S C Cardiac Lesions as Observed in the Negro With Special Reference to Pericarditis by Frank A Jones Memphis 'Some Points in the Treatment of Pericarditis" by Frank Parsons Norbury of Jacksonville Ill They were discussed by Drs De Lancey Rochester of Buffalo James J Walsh of New York City H B Sears of Beaver Dam Wis J B Herrick of Chicago Carl Beck of New York City J D Smythe of Greenville Miss and R B Preble of Chicago

A paper on Some Points in Raynaud s Disease' by Carl Beck of New York City was discussed by Dr Charles G Stockton of Buffalo

As delegates to the House of Delegates the Chairman appointed J M Anders of Philadelphia and Norman Bridges of Los Angeles Cal

The following resolution was handed the Chairman of the Section for action by J A McKenna

Resolved That Section 1 Chapter IX (By Laws) be changed to read instead of Section on Practice of Medicine to the Section on Practice of Medicine Dietetics and Therapeutics' for the reason that therapeutics and dietetics are so closely allied to the practice of medicine that their consideration should be taken up in this Section and

Resolved That the Sections from which the subjects of dietetics and therapeutics are subtracted be rearranged by the House of Delegates

Referred to the Executive Committee for action

FRIDAY JUNE 7

This session was a joint session with Section on Hygiene and Sanitary Sciences

The Symposium on Smallpox consisted of papers on A Further Report on Pseudo or Modified Smallpox by T J Happel of Trenton Tenn Smallpox The Old and New by W L Beebe of St Cloud Minn Remarks Covering the Sanitary Features of Smallpox by Louis LeRoy of Nashville Tenn The Diagnosis of Mild Smallpox as in the Present Outbreak of the Smallpox in This Country by Heman Spalding of Chicago The Distinguishing Characteristics Between Mild Discrete Smallpox and Chicken pox by Frederick Leavitt of St Paul and Smallpox by H M Bracken of St Paul They were discussed by Drs William Bailey of Louisville Ky James J Walsh of New York City Louis LeRoy of Nashville Tenn Thos Wm Corlett of Cleveland F S Raymond of Memphis J F Marchand of Canton Ohio D B Pritchard of Winona, Minn J M Barr of McKees Rock Pa E H Martin of Clarksville Tenn G W Goin of Breckenridge Mo C F Dwight of Minneapolis T J Happel (closing) H Spalding (closing) F Leavitt (closing) and H M Bracken (closing)

The following resolution was presented by Dr Henry D Holton, of Brattleboro, Vermont

Resolved, By the Joint Sections on Practice of Medicine, and Hygiene and Sanitary Science, That the disease now prevailing extensively in the United States and called in some instances, "Pseudo smallpox" is genuine smallpox and should be so treated with vaccination and quarantine by all health authorities Carried

The Section then adjourned

Section on Surgery and Anatomy

TUESDAY, JUNE 4—AFTERNOON SESSION

The meeting was called to order by Dr A J Ochsner, the chairman

The following papers were read "Remarks on the Surgery of the Spinal Cord with Illustrative Cases,' by Dr Andrew J McCosh New York City 'Spina Bifida, with Report of an Interesting Case' by Dr Paul F Eve Nashville, "The Methodical Exploration of the Brain for Fluid," by Dr Christian Fenger, Chicago, 'The Immediate and Remote Effects of Brain Injury" by Dr D S Fairchild, Clinton, Iowa This Symposium of papers was discussed by Drs W W Keen, Philadelphia Angus McLean, Detroit Frazier s remarks (contribution) on tri facial neuralgia Weir, Frank, Chicago Lartes Milwaukee Moore, Minneapolis Dawbarn, New York City, Bernays, Maxwell, Keokuk, Means Columbus Crile, Cleveland Taggart, Chicago McKnight, Connecticut, Baldwin, Salt Lake and Vaughan St Louis

WEDNESDAY JUNE 5—MORNING SESSION

The meeting was called to order and the following papers read 'The Mortality of Appendicitis' by Dr John B Deaver Philadelphia Some Unusual Features of Appendicitis and their Treatment," by Dr Ernest Laplace Philadelphia 'The Knot within the Lumen in Intestinal Surgery' by Dr F Gregory Connell Chicago "Surgery of the Colon" by Dr H O Walker Detroit Discussion was by Drs Steele, Chicago Murphy, Chicago Knight Connecticut, Maxwell Iowa, Andrews, Chicago Harris, Chicago Moore, Minneapolis Morris New York City Smythe, Memphis

Dr Jackson concluded the morning session by giving a paper on 'The Teaching of Relational Anatomy, with presentation of specimens

WEDNESDAY, JUNE 5—AFTERNOON SESSION

The meeting opened with the reading of 'The Nature of the Cancerous Process" by Dr Roswell Park Buffalo The Present Status of the Carcinoma Question,' by Dr Nicholas Senn Chicago, Early Diagnosis of Carcinoma—Methods' by Dr Charles A Powers Denver "The Pathology of Breast Cancer and its Relation to Early Diagnosis and Treatment,' by Dr William S Halsted and Dr J C Bloodgood, 'Carcinoma of the Cecum,' by Dr William J Mayo Rochester, Minn "Improved Method of Resecting High Rectal Carcinoma' by Dr Robert F Weir, New York City Method of Operating on Carcinoma of Tongue' by Dr J Collins Warren, Boston, "Treatment of Malignant Disease" by Dr Frederic S Dennis New York This symposium was discussed by Drs Bernays, St Louis Crile Cleveland Rodman, Philadelphia Fuetterer, Chicago, Massey, Philadelphia Dawbarn, New York City, Levings, Milwaukee and McKenzie, Oregon

The Executive Committee reported, through Dr Rodman the names of Dr De Forest Willard of Philadelphia, for chairman and Dr James B Bullitt of Louisville, for secretary Upon vote the nominations were carried

Dr Ferguson moved that the same committee consider names of members for election to the House of Delegates, and report tomorrow at 2 o clock p m

THURSDAY, JUNE 6—MORNING SESSION

The meeting was called to order and the following papers read "Hemostasis in Amputation at the Hip Joint, a Résumé of 262 Cases by the Author s Method," by Dr John A Wyeth, New York City, "Autoplastic Suture in Hernia and other Ventral Wounds, by Dr L L McArthur, Chicago "A New Method of Skiagraphic Diagnosis for Renal and Ureteral Surgery," by Dr L E Schmidt and G Kolischer, Chicago "Prostatotomy versus Prostatectomy for Prostatic Hypertrophy" by Dr Ramon Guiteras, New York City "Prostatectomy, the Method of Choice in the Management of Prostatic Obstruction," by Dr Eugene Fuller, New York City, "A Further Report on Permanent Catheterization," by Dr J R Eastman Indianapolis, "Fallacies in the Treatment of Urethral Diseases," by Dr Robert Holmes Greene, New York City, "Perineal Prostatectomy," by Dr Parker Syms

THURSDAY, JUNE 6—AFTERNOON SESSION

This meeting consisted in the reading of papers in a symposium on the Surgery of the Chest "Pneumectomy and Pneumotomy," by Dr J B Murphy, Chicago, "Insufflation of the Lungs and its Application to Pulmonary Surgery," by Dr Rudolph Matas, New Orleans, "Removal of Foreign Bodies from the Trachea and Bronchi," by Dr De Forest Willard, Philadelphia, "Treatment of Empyema," by Dr James H Dunn Minneapolis These papers were discussed by Drs Means, Columbus, Henry, Omaha, Walker, Detroit Sylvester, Wallston, Ohio Wright, Bridgeport, Conn, Powers, Denver, Eisendrath Chicago, Eastman, Indianapolis, G F Shimonek, Milwaukee, McArthur Chicago, Dawbarn, New York City, Rockey, Warner, Columbus Andrews, Chicago, McGowan, Los Angeles Allaben, Rockford Ill, Guiteras New York City, Syms, New York City, Greene, Litchfield, Ky, Bernays, St Louis, Barber San Francisco, Jepson Sioux City, Iowa, Frank, Chicago, Wills Los Angeles, Norred, Minnesota, Means, Columbus, Willard, Philadelphia, Dunn, Minneapolis

FRIDAY, JUNE 7—MORNING AND FINAL SESSION

The meeting was called to order and proceeded to the reading of the following papers "Acute Infective Cholangitis and Cholecystitis as a Complication of Gall stones," by Dr Daniel N Eisendrath, Chicago, "Dissecting Abscesses of Abdominal Wall Producing Symptoms Simulating Pott's Disease of the Spine," by Dr James Bullitt, Louisville

These papers were discussed by Drs Smythe, Memphis McGowan, Thomas, Pittsburg, Crane, Vermont, Means, Columbus Davis, Omaha Rodman, Philadelphia Lemon, Milwaukee, Bloodgood Baltimore, Porter, Fort Wayne, Phillips Rocky Ford Mitchell, Missouri Maxwell, Iowa Bernays St Louis, Leonard, Philadelphia, Eisendrath, Chicago Bullitt, Louisville, Grant, Denver

"Fractures of Femoral Neck' was read by Dr Ruth, of Iowa, with exhibition of patient, discussed by Drs Thompson, of Scranton, and Liston Montgomery, of Chicago

Dr Pennington gave a blackboard demonstration and paper entitled, 'A Simple Operation for the Treatment of Hemorrhoids

Section on Obstetrics and Diseases of Women

TUESDAY, JUNE 4—AFTERNOON SESSION

The Section was called to order at 2 p m by the Chairman Dr H P Newman, at the Masonic Hall Dr Edwin Ricketts read the report of the Committee on Reorganization, which on motion of Dr Henry, of Omaha, was adopted and the Committee continued to carry out the details suggested

Here Dr Ricketts took the chair while the Chairman, Dr H P Newman, delivered his Address On motion, this address was referred to the Committee on Publication

Dr A H Cordier, Kansas City, read a paper entitled "Post Operative Intra Peritoneal Hemorrhage" This was discussed by Drs L S McMurtry, Howard Kelly Seth Gordon H O Marcy, F H Wiggin, C C Frederick, M L Harris, G B Massey and, in closing by Dr Cordier

Dr J G Clark Philadelphia, read a paper entitled "Contributing Factors in the Production of Peritonitis' It was discussed by Drs Wiggin, Humiston, Kelly, Baldy Carstens, Wathen Deaver Bovée, Henry Kolischer Watkins, Dudley, Andr Smith, Ries, and in closing, by Dr Clark

The next paper was read, by invitation, by Dr M D Mann Buffalo, on 'A New Operation for Extirpation of Cancer of the Rectum' It was discussed by Drs Marcy, Bovée, and, in closing by Dr Mann

Dr John Deaver read a paper entitled 'The Accidents and Complications of Pelvic Surgery and Their Treatment" It was discussed by Drs Carey, Harris Frank Warner, Ricketts Henry, Smith Steele, Watkins, Rosenthal and, in closing by Dr Deaver

The Chair appointed the following Nominating Committee A H Cordier, W L B Davis L S McMurtry, S Gordon C C Frederick Committee on Reorganization Bovée, Ricketts and Henry

WEDNESDAY, JUNE 5—MORNING SESSION

Meeting was called to order at 9 a m by the President

Dr O Theinhaus Milwaukee read a paper entitled "Atresia Hymenalis' and exhibited pathologic specimen Discussed by Drs McDiarmid and Goldspohn

Results, Immediate and Remote, of Conservative Surgery' was the title of a paper read by Dr A Goldspohn, Chicago It was discussed by Drs Bovée, Jos Eastman Cohn, Specht, Henry and, in closing, by Dr Goldspohn

Dr A J Downes Philadelphia read a paper entitled "Electrothermic Hemostasis in Abdominal and Pelvic Surgery" It was discussed by Drs F H Martin Massey, Ries, Eastman, Newman Bovée, and, in closing, by Dr Downes

WEDNESDAY, JUNE 5—AFTERNOON SESSION

The meeting was called to order at 2 p m

First paper was read by Dr E E Montgomery, Philadelphia How Shall We Deal with Uterine Myomata? It was discussed by Drs Eastman, Gordon, Wathen, Palmer Dudley, Massey, and, in closing by Dr Montgomery

'Carcinoma of the Uterine Neck' was read by Dr J M Baldy, and discussed by Drs Carstens Clark Zinke, Ries, Montgomery, Kolischer Massey, Bovée Wiggin Duff, and Baldy in closing

The Relative Merits of the Different Methods of Uretero ureteral Anastomosis was read by Dr J Wesley Bovée Washington "Some Results of Ovarian Surgery with Further Report upon Intra uterine Implantation of Ovarian Tissue was read by Dr A Palmer Dudley New York City Discussed by Drs Goldspohn Goffe Humiston and Dudley in closing

"The Various Incisions Appropriate to Different Renal Operations was read by Dr H A Kelly

THURSDAY, JUNE 6—MORNING SESSION

The meeting was called to order at 9 a m

Dr E Ries read a paper entitled "A New Operation for Retrodisplacement of Uterus"

Dr F H Martin Chicago "Surgical Treatment of Retroversion of Uterus Discussed by Drs Goffe, Gordon, Goldspohn Kelly, McDiarmid Ries and Martin

Nominating Committee reported Chairman, J H Carstens Detroit secretary, C L Bonifield, Cincinnati

THURSDAY, JUNE 6—AFTERNOON SESSION

The meeting was called to order at 2 p m by Dr H O Marcy

The Committee on Reorganization reported, which, on motion of Dr Humiston was unanimously adopted

It was moved that the secretaryship of the Section be made permanent Carried

The number of papers in this Section hereafter will be limited to thirty six, fifteen minutes being allotted for the reading of each paper The Chairman called attention to the importance of members furnishing abstracts of their papers, to be published in the official program At future meetings of this Section the Chairman will arrange for two men to open the discussion on papers

The following papers were read 'The Practice of Obstetrics as It Is and as It Should Be" by Dr E G Zinke, Cincinnati "Position of Patient During Delivery, by Dr W D Porter, Cincinnati "Puerperal Sepsis" by Dr J F Moran, Washington "Indications and Contra indications for the Use of Curette in Obstetric Practice," by Dr H D Fry Washington "A Case of Streptococcus Infection Following Labor Operation, Recovery" by Dr W H Humiston Cleveland Discussed by Drs Harris M F Porter, Case Henry Ricketts Dannaker, Bovée, Specht and in closing by W D Porter and J F Moran

The Increasing Sterility of American Women was read by Dr G J Engelmann, and discussed by Drs Duff Wathen, MacDiarmid Ferguson of New York M F Porter Jack H W Graham Coy of Duluth and in closing by Dr Engelmann

Dr C Dannaker moved that the American Medical Association communicate with the proper United States authorities that it is the desire of this society that in the future compilation of the United States census that the fecundity of the American family be taken into consideration the nativity of father and mother being made a matter of record and the number of children born Carried unanimously

On motion a committee was appointed to bring the matter before the proper authority Drs G J Engelmann Ferguson of New York and C L Bonifield

Ectopic Gestation was read by Dr W H Wathen and discussed by Drs Goldspohn and Wathen

Dr L S McMurtry Louisville and Dr W H Humiston Cleveland were elected members of the House of Delegates

FRIDAY JUNE 7—MORNING SESSION

The meeting was called to order at 9 a m by the Chairman

Dr T J Beattie of Kansas City Mo read a paper entitled Puerperal Eclampsia its Etiology and Treatment It was discussed by Drs Bonifield Cates Plummer Rosenthal Hall and Beattie in closing

Cesarean Section as a Method of Treatment of Placenta Previa was read by Dr W J Gillette of Toledo and discussed by Drs Eastman Bernays Henry Engelmann Dugan Oyler, Bonifield Reese Newman and the essayist

Intra uterine Amputations was read by Dr J Maher, Gynecology its Contributions to Surgery by Dr H O Marcy

Adjourned *sine die*

New Members

The following is a list of new members for May

ARKANSAS

Young J M Little Rock
Stover Arthur Reece Little Rock
Cann, Dewell Benton

CALIFORNIA

Purdon J E, Turlock
Fenyes, Adalbert, Pasadena
Jones W Harriman St. Helena
Stephens Wm Bradley San Francisco
Werner A F San Francisco
Newkirk Garrett Los Angeles
Magee Thos L San Diego
Baird J Gordon Riverside
Visscher L G Los Angeles
Outwater Sam l Riverside
Ball Chas A Santa Ana

COLORADO

Clark, Jas L Denver

CONNECTICUT

Flint Eli P Rockville
Parmele Geo L Hartford
McKnight, Everett J Hartford

DELAWARE

Winner William G Wilmington

ILLINOIS

Rose Frank L Chicago
Butzoe Arthur M Chicago
Lieberthal David Chicago
Anthony Henry G Chicago
May S R Mt Zion
Kerr Norman Chicago
Carr Edgar D Argenta
Parrish M P Decatur
Curry Thos Walter Streator
Sullivan E A Amboy
O Malley Thos Jas Joliet
Suker Geo F Chicago
Wesener Jno Alfonso Chicago
Harrison Wallace K Chicago
St John Leonard Chicago
Dodson John Milton Chicago
Earle C A Desplaines
Patton Jos M Chicago
Kolischer G Chicago
Goodkind Maurice I Chicago
Livingston W R Maywood
Brode Willard D Chicago
Montgomery A B Reynolds
Allport H W Chicago
Adams Nathaniel H Chicago
Huston Irwin E Roanoke
Wilcox J M Clinton
Kurtz Russell L Neoga
Viel John W Carterville

INDIANA

Cunningham Wm Ralph Bourbon
Long C R Pierceton

IOWA

Richardson Leon F Terril
Michel Bernard Dubuque
Miller Frank W Red Oak
Brown Luther Rockford
Schultz Chas S Lake Park
Grimes Eli Des Moines
Brooks J M Newell
Slattery Wm P Dubuque
Reynolds Jno W Creston
Niemack Julius Charles City
Birney Varilles C Greene
Fraser Jefferson E Garner
Brackett A R Charles City
Berner W F Merrill
Christy Wm D Shannon City
O Keefe J E. Waterloo
Schilling N, New Hampton
Dorr E E Des Moines
Sanders Chas Willard Manley
Vesterborg Peder H Forest City
Merrill N Marshalltown
Flynn Chas H Postville
Keogh John V Dubuque
Powers F W Reinbeck
De Armand J A Davenport
Bay Edgar L Eddyville
Young J Bonaparte
Brownson J J Dubuque
Christensen F A, Lake Mills

KANSAS

Sheridan Allen V Paola
Gardner M N Greenleaf
Tracy Frank M Kansas City
Clarke H L Lacygne
Carpenter, Chas R Leavenworth
Saunders Nathan J Cawker City
Bogle Herman H Pittsburg
Stryker Isaac E Baxter Springs
Hutton Alfred Lincoln

KENTUCKY

Fleck Chas G Covington

LOUISIANA

Reeves Marcus Clifford Vidalia

MAINE

Ward Parker M Houlton
Marshall N M Portland

MARYLAND

Medders Chas H Baltimore
Henry Wm T Fishing Creek

MASSACHUSETTS

Beals Arthur L Brockton
Beckley Chester Chas Lancaster
Foskett Geo M Worcester
Hartung Harry Hall Boston
Harmon Melvin A Lynn
Cabot Arthur Tracy Boston

MICHIGAN

McGugan Arthur Kalamazoo
Broisacher Leo Detroit
Morse H Peach Elk Rapids
Lewis, C H Jackson
Greenmayer John D Niles
White Jas G Mt Clemens
Rowe Wm E Allegan
Jones John R Detroit
Gardiner S I Mt Pleasant

MINNESOTA

Brimhall John B St Paul
Schwyzer Gustav St Cloud
Hvoslef Jacob Minneapolis
Geer Ethelbert I St Paul
Murray Wm R Minneapolis
Wells Ernest Eldred Barnum
Soper John Elford, Norwood
Daniel, Orlanna M Minneapolis
Tibbetts J I Wayzata
Whitney A W St Paul
Crafts Leo M Minneapolis
Taylor, Wm J, Pipestone
Leavitt, Frederick, St Paul
Nanlen, Frank A St Paul
O Brien H J, St Paul
Christison, J F St Paul
Keyes Chas R Duluth
Bayley, Emery H, Lake City
Bohland Fuchs F J Belle Plain
Day Lester W, Minneapolis
Christie G R Long Prairie
Estabrook, Edw L, Minneapolis
Portmann Wm C Jackson
Daniels Jared W St Peter
Chapman W E Litchfield
Cavanaugh J O, St Paul
Benepe, Louis M, St Paul
Senkler Geo E St Paul
Kilvington S S Minneapolis
Kohler Christian H, Minneapolis
Graham Benj I Minneapolis
Lee Thos G Minneapolis
Davis Jas P Kellogg
Scoboria C Q Elm River
McDonald Hugh N Minneapolis
Kenyon Paul Wadena
Von Berg J P Albert Lea
Stevenson Geo A Albert Lea
Friedlander Sam l Minneapolis
Newhart Horace Minneapolis
Andrist J Walter Ellendale
Kistler Arthur S St Paul
Aborn W H Hawley
Knudsen Becker Chr Tyler
Macdonald A St Paul
Richardson Walter J Fairmont
Fischer Otto Ferdinand Houston
Stratheen Fred P St Peter
Lynn Jas F Waseca
Dredge Homer Percy Belview
Williams A Elton Minneapolis
Schlueter Robt E, St Paul
Wilson Louis Blanchard, Minneapolis
Robertson Jas W Litchfield
Denny Chas F St Paul
Simon, B F, St Paul
Baker J F St Paul
Erdmann Chas A Minneapolis
Cates A B Minneapolis
Knight Frederick A Minneapolis
McLaren Jennette M St Paul
Binder Geo A St Paul
Austin Mabel H St Paul
Brown LeRoy St Paul
Henderson Andrew St Paul
Ritchie Harvey P St Paul
Lando David H, St Paul
Shelby E C. St Paul
Stein Gottlieb St Paul
Kilbourne, Arthur Foot Rochester
Colvin Alexander R St Paul
Stamm Gottfried St Paul

MISSOURI

Mills O P M Grant City
Brook Hyman St Louis
Fry Frank R St Louis
Bernays Augustus C St Louis
Wolfe Benj F Carthage
Peak Oscar L Springfield

MISSISSIPPI

Elmore R C Black Hawk
Mitchell A T Vicksburg
Kiger W G Brunswick
Trotter Clifford H Winona

NEBRASKA

Kearns A J Loup City
Berry Wm South Omaha
Stevens Jas Franklin Lincoln
Vance Jno H Omaha
Ziegler Chas H Vesta
Meredith G A Crawford
Foote J S Omaha

NEW YORK

Nagel Jos D New York City
Congdon W O Cuba
Newborn, Ala Duke New York City
Fentz Henry G Buffalo
Moore B S Syracuse
Bluestone Jos I New York City
Walker LeRoy P New York City
Traub Jno Emil New York City
Smith Jos James New York City
Kerrigan Jos A New York City
Musgrave Christopher J, New York City
Barber Annetta E, Glen Falls

NEW JERSEY

Wallace, Dana L, Newark

NORTH DAKOTA

Clark Sidney B Buffalo
Grassick Jas Buxton
Darrow Edw M Fargo
Wadel, K A Portland
Porter Henry R, Bismarck
Church R Jerome Conway

NORTH CAROLINA

Coggeshall George Albert Henderson

OHIO

Schilling C E Canton
Ehret G A Cleveland
Knauss W H, Newark
Purviance, J I, Steubenville

OREGON

Hemenway, Stacy, Klamath Agency

PENNSYLVANIA

Sturgeon Jno D Uniontown
Nagle Thos S, Allentown
Todd D O Cochran Mills
Wolfe, Sam l N Wilkes Barre
Morris Jos P, St Clair
McGreevy, W H Scranton
Bateson John C Scranton
Bush A A, Mamont
Leatherman D I Williamsburg
Vinton, Chas Harrod Wernersville
Walker, W K, Dixmont

SOUTH DAKOTA

Keeling, Chas Monroe, Springfield
Raberge Frances L, Milbank
Stillwell Hiram R Tyndall
Gyllenhammar F N H Gayville

TEXAS

Fly David Richard Amatillo
Halley, J T Galveston
Gough Roy H Hereford
Hughes Chas T, Gainesville

TENNESSEE

Buist W Edw Nashville
Smyth Frank D Memphis
Preas Jas H Johnson City
Porter, A R Memphis
LeRoy, Louis Nashville
Todd J D, Trezevant

WEST VIRGINIA

Moore Thos Waterman Morgantown
Magill Wm Seagrove Morgantown

VIRGINIA

McCoy, Wm Kenneth Richmond

WISCONSIN

James Q W Solon Springs
Martin M T Merrimack
Bolkoon Geo W Clear Lake
Read H M Menomonie
Riddle Julia Oshkosh
Job de Besche, Milwaukee
French Viola M Neillsville
Cheever Wm R Kenosha
Hopkins Wm B Cumberland
Saunders Geo West Superior
Ross A Oshkosh
Madden John Milwaukee
Breakey Jas R Alma Center
Houck Mary Piper La Crosse
Houck Oscar La Crosse
Hannum Henry Payfield
Rhodes Edson Galesville
Mulford Edwin Rossiter La Crosse
Boyce Sam l R Madison

WYOMING

Young J Henry Cumberland

MEXICO

Yearwood Kelly James San Luis Potosi

UTAH

Woodring Wm W Mt Pleasant

ASSOCIATION OF MILITARY SURGEONS OF THE UNITED STATES

10th Annual Meeting, held at St Paul, May 30, 31, and June 1

President Brig Gen Alexander J Stone in the chair

Rations and the Canteen in the Army in the Tropics

DR LOUIS L SEAMAN, U S V, New York City, showed no mercy to those who brought about the abolition of that institution It was a telling indictment The facts cited cut the ground from under those responsible for this disastrous "reform" He pointed out that only 5 per cent of the enlisted men are total abstainers that the rest are men who became accustomed to drinking before they entered the army and who will get liquor in some way whatever the obstacles They are not prisoners but are well paid men who have their "pass days' or days off, as they ought to have If liquor is denied them at the exchange they will take the first occasion to get it somewhere else In this country the stopping of the sale of beer at the post exchange has caused the soldier to satisfy his taste for alcohol with "vile doctored whisky" In Porto Rico he turns to "rum loaded with fusel oil" in the Philippines to the deadly "vino, a sort of wood alcohol," and in China to "shamsu,' a product of rice—all "rank poisons" These maddening liquors lead to insubordination and to desertion to debauchery and to diseases of the worst description At the close of the discussion the following resolution was adopted

'Whereas, The Association of Military Surgeons of the United States, now in session at St Paul, recognizes that the abolition of the army post exchange or canteen has resulted and must inevitably result, in an increase of intemperance, insubordination, discontent desertion and disease in the army, therefore be it

"Resolved, That this body deplores the action of Congress in abolishing the said post exchange or canteen, and in the interests of sanitation, morality and discipline recommends its re establishment at the earliest possible date '

Secondary Hemorrhage

DR CHRISTIAN FINGER, of Chicago was made an honorary member, and presented an interesting paper on this subject

The papers read were few but they elicited an animated discussion

Clinics were given by Drs Archibald MacLaren, Charles A Wheaton and John F Fulton A reception was tendered the Association at the Aberdeen, a theater party was given at the Metropolitan Opera House and the members were driven to Fort Snelling and there entertained by Captain and Mrs Bradley and the officers and ladies of the post

Election of Officers

The following officers were elected Major John Van R Hoff, surgeon, U S Army, Washington, D C, president, Brig Gen Robert A Blood, surgeon general of Massachusetts Boston, and Surgeon General Walter H Wyman, U S Marine Hospital Service vice presidents, Captain James E Pilcher, assistant surgeon, U S Army (ret), secretary, and Lieut Herbert A Arnold assistant surgeon, N G Pa, Ardmore, treasurer

Married

HERBERT N RAFFERTY, M D, to Miss Bess Alexander, both of Robinson, Ill, May 28

V F LASSAGNE, M D, Chicago, to Miss Carrie Hawley, of Eureka Springs, Ark, May 25

ALLEN ELLIS COX, M D, Milan Tenn, to Miss Lucile Folk, of Brownsville, Tenn, May 30

ABRAHAM D MILLER, M D Indian Springs, Tenn, to Miss Maud Roller, of Kingsport, Tenn

ROBERT J SHAW, M D, Georgetown, Colo, to Mrs M J Kutus, of Lincoln, Neb, at Denver, May 22

ANNE HOLT, M D, Colorado Springs, Colo, to Carl E Trulock of Chicago, at Tullahoma, Tenn, May 6

LOUIS GROSS, M D, San Francisco, to Miss Ida Solomon, of Chicago, May 14 Dr and Mrs Gross sailed for Europe, where the doctor will study for a year

Deaths and Obituaries

Wm H Daly, M D, University of Michigan, 1866, prominent as a physician in Pittsburg, a member of the AMERICAN MEDICAL ASSOCIATION, died from the effect of a gunshot wound of the head, self inflicted, at his home, June 9, aged 59 Dr Daly was a Virginian and served in the Confederate army After his graduation, he paid especial attention to laryngology, and in 1894 was made president of the American Laryngological Association, and three years later served as president of the American Laryngological, Rhinological and Otological Society He was a member and for ten years secretary of the Allegheny County Medical Society, a member of the Medical Society of Pennsylvania, Association of Military Surgeons of the United States, British Medical Association and other societies, and served several times as delegate to foreign medical societies and congresses He was also for a long time a member of the Medical Department of the National Guard of Pennsylvania At the outbreak of the Spanish American War he was appointed major and chief surgeon of volunteers and was assigned to duty on the staff of General Miles After the war he had the misfortune to lose his wife and he became melancholy, lost all interest in his practice and all pleasure in his life, and this, together with the notoriety and implied censure regarding the "embalmed" beef scandal undoubtedly drove him to suicide

William S Caldwell, M D, Jefferson Medical College, Philadelphia, 1864, a member of the AMERICAN MEDICAL ASSOCIATION, and well known to the readers of THE JOURNAL as the writer of "Rambling Notes of a Roving Doctor," died at his home in Freeport, Ill, June 7, from paralysis, aged 68 Dr Caldwell was a prominent feature in the medical world, he was at the head of the profession of northwestern Illinois, a man of broad learning, widely traveled and a close student of human nature He was a native of South Carolina and lived until the age of 14 in Arkansas and the Indian Territory After his graduation in medicine he settled down to practice in Elizabeth, after 15 years moved to Warren and eight years later to Freeport, in the meantime spending three years in study in Europe In addition to his membership in the National Association, he was a member of the British Gynecological, Mississippi Valley International Railway Surgeons' Associations and the Illinois State Medical Society

John L Feeny, M D, New York University, 1866, died at his home in Stapleton Staten Island N Y, May 31, aged 56 For years he was a police surgeon, subsequently health officer of the village of Edgewater and then a supervisor of the county until 1893, when it was consolidated with New York City Afterwards he became assistant sanitary superintendent of the borough

Lewis S Tesson, M D, major and surgeon, U S Army, a native of Missouri, who became a member of the Medical Department of the Army in 1875, and had served at many important army posts, died at Vancouver Barracks, Wash where he was stationed as Medical Director of the Department of the Columbia, June 8, from apoplexy after an illness of one month, aged 59

E Paul Sale, M D, Tulane University, New Orleans 1869, a member of the AMERICAN MEDICAL ASSOCIATION, of the State Tri State Mississippi Valley and Memphis Medical Associations, and professor of materia medica and therapeutics in Memphis Medical College died June 7 from injuries received by being thrown from his horse against a stone curb

Hugh Stockdell, M D, Jefferson Medical College Philadelphia, 1859, who had practiced in Petersburg, Va, for more than forty years with the exception of the period of the Civil War, when he served with distinction as surgeon and later as chief medical purveyor in the Confederate Army, died May 23, at his home, after a lingering illness, aged 65

Dwight Mereness, M D, Long Island College Hospital, Brooklyn, N Y, 1886 a well known and esteemed physician of Milwaukee died at Trinity Hospital in that city May 29, after an operation, aged 41 He was a member of the local

and state societies and of the AMERICAN MEDICAL ASSOCIATION

John E Comfort, M D, Albany (N Y) Medical College, 1864, died at his home in the Borough of the Bronx, New York City, May 29, aged 63 years For more than thirty years he was in active practice in the upper wards of New York and served twelve years as Health Board inspector

Allen T Barnes, M D, Kentucky School of Medicine, Louisville, 1857, for many years postmaster of Bloomington, and previously superintendent of the Illinois Southern Hospital for the Insane, Anna died at his home in Bloomington, May 30 from pneumonia, aged 67

John Spare, M D, Howard University Medical School, Boston, 1842 who had resided in New Bedford, Mass, for more than half a century and who served as a surgeon in the navy during the Civil War, died at his home in New Bedford, May 22, aged 84

George Sterne Osborne, M D, Harvard Medical School, Boston, 1862, who served during the Civil War as surgeon in the Union Army and then after two years of study abroad, settled in Peabody Mass, died at his home in Salem Mass, May 25

Francis W Coleman, M D, Tulane University, New Orleans La, 1866, one of the most widely known physicians of Mississippi who had practiced at Rodney for thirty five years died suddenly in a hotel in New Orleans May 28, aged 55

James R Bayley, M D, University of Cincinnati, Ohio 1851 an active practitioner of Oregon, formerly a member of its Territorial Council and of its State Senate died at his home in Newport, Ore May 24, aged 81

Allen M Sumner, M D,, Harvard University Medical School, 1868, for many years visiting and consulting physician at the Boston City Hospital died at his home in Boston, May 25, from acute nephritis, aged 57

Charles F Close, M D, University of Iowa Iowa City 1896, a member of the AMERICAN MEDICAL ASSOCIATION, and a resident of Chicago died from consumption at Los Angeles, Cal, May 29, aged 27

La Baume Elliott M D University of Nashville Tenn 1854 the oldest practitioner of Dallas Texas died at his home in that city May 23 aged 78 He served as surgeon in the Confederate army

Lillian E Abbott, M D, Woman's Medical College New York 1892 a member of the New Hampshire State Medical Society died as a result of poison self administered May 28 aged 33

Demetrius P Sypert, M D, University of Nashville Tenn 1866, a prominent physician of Montgomery County, died at his home in Clarksville Tenn from apoplexy May 21 aged 60

Henry Tyler Phillips, M D, Albany Medical College 1860 who had practiced in Cheshire Mass for forty years died there after a short illness from diabetes May 24, aged 67

Abram J Miller M D, Rush Medical College Chicago 1858 the Nestor of the local profession died at his home in Paris Ill after a prolonged illness May 22 aged 78

Jesse W Allen, M D, Vanderbilt University, Nashville Tenn 1880 a prominent physician of Guthrie Ky died suddenly at his residence in that place May 28 aged 45

Wright L Witham, M D, Ohio Medical College, Cincinnati 1900 was instantly killed by lightning at his home South Lebanon Ohio May 24

Elmer C Goldthorpe, M D College of Physicians and Surgeons Chicago 1893 died at his home in Englewood Chicago May 18, aged 35

Thomas E Fitzgerald M D, New York University, 1895, died at his home in Jersey City N J, May 21 after a long illness aged 26

J H Miller M D, University of Pennsylvania Philadelphia 1891 died at his home in Sheridan, Mont May 21 aged 35 years

Edwin H Austin, M D, Detroit Medical College, 1880, died at his home in Gaines Mich, May 22, from pneumonia, aged 45

Demetrius P Sypert, M D, University of Nashville, 1866, died from apoplexy at his home at Clarksville, Tenn, May 21

Frank J Webb, M D, Howard University, Washington, D C, 1895, died at his home in Washington D C, May 18

George J Heitzmann, M D, Paris, France, 1849, died suddenly at his home in Marinette Wis, May 22, aged 62

George J Heitzmann, M D, Paris, France, 1849, died suddenly at his home in Marinette, Wis, May 21

A N Brackett, M D, Vermont Medical College, Woodstock, 1851, died at Negro Va May 14

Book Notices

DISEASES OF THE HEART A Clinical Text Book for the Use of Students and Practitioners of Medicine By Edmund Henry Colbeck, B A, M D, Cantab M R C P London, D P H Cantab, Physician to the Out Patients at the City of London Hospital for Diseases of the Chest With 43 Illustrations Cloth Pp 341 Price, 12 shillings London Methuen & Co 1901

This volume is attractive and neat in appearance The material is well arranged and classified and the various subdivisions are marked in full faced type, rendering it easy to find what one is seeking The index is well arranged and comprehensive, which is a most important feature of a text book Probably the most instructive chapter for the student is that on "Method of Diagnosis" Each method of physical diagnosis is gone into thoroughly and cause and effect are dealt with in detail The chapters on the various endocardial lesions are concisely written, but that on mitral incompetence is amplified so that its study will give one a working basis of knowledge for the other endocardial affections Altogether the book is well written and is worthy of a place on the table of both the student and practitioner

AN INTRODUCTION TO PHYSIOLOGY By William T Porter, M D, Associate Professor of Physiology in the Harvard Medical School Cloth Pp 314 Price $2 50 Cambridge, Mass The University Press 1901

The leading principle in the system of teaching contemplated by this "Introduction" is that the student shall perform for himself the fundamental experiments of the science As all experiments in physiology can not be performed in the time now ordinarily devoted to its teaching in medical schools, a careful selection must be made In order to master at least one field necessary for the scientific training requisite for further independent study, the nerve and muscle has been selected as the part best adapted for exact observation and clear reasoning Hence the experimental physiology of the nerve muscle preparation is thoroughly set forth from various points of view Then the mechanics of the circulation and the innervation of the heart and blood vessels are discussed The apparatus described is trustworthy and quite simple The subjects are presented from the chemico physical standpoint, and the book is recommended as an excellent guide for the purposes indicated It is illustrated with 57 figures

A TREATISE ON DISEASES OF THE NOSE AND THROAT By Ernest L Shurly M D, Vice President and Professor of Laryngology and Clinical Medicine, Detroit College of Medicine Illustrated Cloth Pp 744 Price $5 00 New York Appleton & Co 1900

This volume has been prepared specially as a practical guide to the general practitioner and medical student The etiology symptomatology, pathology and treatment of the various affections of the nose and throat are thoroughly discussed yet with a conciseness that eliminates useless speculation on unimportant theories The book opens with a chapter on the anatomy of the parts and closes with a list of prescriptions for convenience and ready reference The Latin is occasionally wrong as for instance *meati* for *meatus* or the Anglicised form 'meat

uses,' on p 512 The illustrations are numerous, while the colored plates appear to have been inserted with a view to being exact and instructive, rather than brilliantly beautiful as often is the case in representations of the mucous membrane We unhesitatingly recommend the book

Miscellany

The Slow Growth of Fees —To Astley Cooper as to most men who rise to eminence, says an authentic biography, "remunerative practice came but slowly" "My receipts," says he, "for the first year was £5 5s, the second, £26, the third, £54, the fourth £96, the fifth £100, the sixth, £200, the seventh, £400, the eighth £610 the ninth (the year in which he was appointed surgeon to the hospital), £1100

Determination of the Acidity of the Urine —O Naegli observes that the acidity of the urine is only that excess of acid above the point where it is neutralized by the alkalinity The urine may contain large amounts of acid and also large amounts of alkalies and the point of neutralization be proportionately high Titration of the bases, therefore, is the only means to determine the actual acidity, and phenol phthallein is the best test for the excess above the point of neutralization He describes his method in the *Ztft f Psysic Chemie*, xxx, 1900, p 313

The International Congress of Insurance Examiners —The second international congress of physicians connected with life and accident insurance companies is to be held at Amsterdam in September, as already announced Professor Brouardel, officially connected with the Equitable, of New York, is one of the secretaries, 28 rue de Chateaudun, Paris A committee is to report on the universal medical formula for insurance examiners Stokvis will deliver the address on albuminuria and Siredey on glycosuria in their relation to life insurance Other subjects to be discussed from the same standpoint are otitis media, hereditary taints, syphilis and cutaneous diseases, tremors, appendicitis and eye affections Crocq will speak on the importance of the reflexes in examining for life insurance, and others on the acceptance of persons who have resided in tropical countries

Responsibility for Count of Sponges in Surgical Operations —Many will recall the suit for malpractice brought some time ago against a surgeon of Columbus, Ohio, for the death of a patient from a gauze sponge which had been left in the abdomen after a gall stone operation The operation had been made in a public hospital and the head nurse of the hospital had been personally in charge of the sponges In response to the surgeon's inquiry thrice repeated, she had assured him that all her sponges were accounted for, and the abdomen was therefore closed Recovery was prompt, but some two months later obstruction of the bowels supervened and an operation, made when the patient was practically moribund, revealed the presence of a sponge as the cause of the obstruction The attorneys who instituted the suit, while admitting that the surgeon himself had adopted the usual precautions and that the death was the result of the act of the nurse, claimed that the nurse was technically the agent of the surgeon and that the latter was therefore responsible for her blunder A similar suit, and on similar grounds, was instituted about the same time against an Atlanta, Ga, surgeon The Atlanta case was tried some months ago and the surgeon promptly acquitted, the individual responsibility of the nurse having apparently been proven to the satisfaction of the jury The decision in the Atlanta case is supposed to have been the actuating cause which recently led the attorneys at Columbus to withdraw their suit, at their own costs, and institute proceedings against the hospital where the operation was made This suit has only just been filed and the outcome will be watched with much interest, since the suit presents some novel features The decision in the Atlanta case and the withdrawal of the suit in the Columbus case will go far to establish the principle that when the surgeon is operating with a graduate nurse in charge of the sponges he can not be held responsible for her carelessness, unless from previous experience he knows her to be untrustworthy

Societies

COMING MEETINGS

Colorado State Medical Society, Denver, June 18
Medical Society of New Jersey, Deal Beach, June 25 27
Wisconsin State Medical Society, Waukesha, June 26
Medical Association of Nevada, Reno, July 1
American Ophthalmological Society, New London, Conn, July 17

Chicago Academy of Medicine —At the annual meeting of this organization, May 24, Drs W L Baum, T G Kiernan and H N Moyer were chosen directors for the coming year

Physicians' Club (Chicago) —At the annual meeting of this club, May 27, Drs W S Christopher, Joseph Zeisler and G Frank Lydston were elected directors, and Dr L Harrison Mettler was re elected secretary and treasurer

Ophthalmological and Otological Society of Washington, D C —At the thirty seventh annual meeting of this Society, Dr Stephen O Richey was elected president, Dr William H Wilmer, vice president, and Dr Anton Coe, secretary and treasurer

First District Branch of the New York State Medical Association —The annual meeting of this body was held at Utica, May 21 Dr C B Tefft, Utica, was elected president, Dr J W Douglas, Boonville, vice president, and Dr E H Douglas, Little Falls, secretary and treasurer

American Dermatological Association —This Association held its twenty fifth annual convention in Chicago, May 29, 30 and 31 Dr George Jackson, New York City, was elected president, Dr Joseph Zeisler, Chicago, vice president, and Dr Frank H Montgomery, Chicago, secretary and treasurer

American Association of Life Insurance Examining Surgeons —The second annual convention of this body was held in St Paul, June 3 The following officers were elected Dr James H Stowell, Chicago, president, Drs James H Reed, Battle Creek, Mich, and Talbot Jones, St Paul, Minn, vice presidents, and Dr Thomas A Stevens, Caney, Kan, was re elected secretary treasurer

Health Officers' Association of Indiana —At the eleventh annual conference of the Indiana state health officers, a new association was organized, known as the Health Officers' Association of Indiana, with the following officers Dr Brose S Horne, Bluffton, president, Dr Nathaniel D Cox, Spencer, vice president, Dr Albert E Powell Marion, secretary, and Dr Hugh A Cowing, Muncie, treasurer

North Dakota State Medical Society —The fourteenth annual meeting of this Society was held at Fargo, May 22 and 23 The following officers were elected Dr Harry D Quarry, Grand Forks, president, Drs Tonnes Thams, Fargo, and Sidney B Clark, Buffalo, vice presidents, Dr E C Branch, Wheatland, secretary and Dr William L Grant, St Thomas, treasurer The 1902 meeting will be held in Grank Forks

Connecticut Medical Society —The one hundred and ninth annual meeting of this Society was held at Hartford, May 22 and 23 Dr John H Giannis, Saybrook, was elected president, Dr J A Shelton, Shelton, vice president, Dr W W Knight, Hartford, treasurer, and Dr J H Townsend New Haven, assistant secretary Dr Charles S Rodman, Waterbury, was chosen as delegate to THE AMERICAN MEDICAL ASSOCIATION

Medical Association of Montana —At the annual meeting of this body, held at Great Falls, the following officers were elected Dr Thomas J Murray, Butte president, Dr T J McKenzie, Anaconda, and Louis Bernheim, Butte, vice presidents, Dr Benjamin C Brooke, Helena, secretary, Dr James F Spelman, Anaconda corresponding secretary and historian, and Dr George H Barbour, Helena treasurer Butte was selected as the place for the next meeting

Medical Society of the State of West Virginia —At the annual meeting of this Society held in Grafton, May 22, 23 and 24 the following officers were elected Dr G A Aschmann, Wheeling, president, Drs C F Amos, Lumberport, Olin H Hoffman, Thomas, Archibald Staunton, Charleston, and Rolla Camden, Parkersburg, vice presidents, Dr William W Golden, Elkins, secretary, and Alonzo Andrews, Martinsburg, treasurer The 1902 meeting will be held in Martinsburg

Kentucky State Medical Society —The forty sixth annual meeting of this Society was held at Louisville May 22 23 and 24 The election of officers resulted as follows Dr T B Greenley Meadow Lawn, president, Drs George M Reddish,

Somerset, and B L Coleman Lexington vice presidents, Dr Steele Bailey, Stanford secretary, Dr Charles W Aitkin Flemingsburg treasurer and Dr Frank L Lapsley, Paris, librarian The society will meet next year in Paducah

Medical Society of the State of North Carolina —This Society held its forty eighth annual meeting at Durham May 21, 22 and 23 The following officers were elected Dr Robert S Young Concord president, Drs Albert G Carr, Durham, Isaac G Taylor, Morganton E Dixon Carroll Raleigh, and James M Parrot Kinston vice presidents Drs George W Pressly Charlotte and Gimrada F Sikes Grisson, were re elected secretary and treasurer respectively Wilmington was selected for the 1902 meeting

The Alumni Association of the John A Creighton Medical College held its annual meeting at Omaha May 7, and elected Dr E C Henry Omaha president Dr Rudolph Rix Omaha secretary and Dr A G Wiley, South Omaha, treasurer The meeting concluded with a banquet at which 50 alumni including the class of 1901, 27 in number, were present Dr E C Henry was the toastmaster Dr B M Riley delivered the address of welcome to the new class, which was responded to by Dr H L Akin

Missouri Medical Association —The forty third annual meeting of this Association was held at Jefferson City, May 21 and 22 The following officers were elected Dr Jefferson D Griffith Kansas City president Drs Robert E Young Jefferson City, John C Whaley, Osceola Robert M Funkhouser, St Louis John F Campbell Callao and George W Vineyard, Jackson, vice presidents Dr B Clark Hyde Kansas City, recording secretary, Dr F W Burke Laclede assistant recording secretary, Dr Charles W Fassett St Joseph, corresponding secretary and Dr J Franklin Welch Salisbury treasurer St Joseph was chosen as the next place of meeting

American Pediatric Society —This society held its annual meeting at the Hotel International Niagara Falls N Y May 27 28 and 29 Papers were presented by Drs Osler Abram Jacobi, T M Rotch Frederick A Packard Henry Koplik F Forchheimer J Crozer Griffith and other prominent pediatrists The following officers were elected Dr William D Booker, Baltimore, president Drs Frederick A Packard Philadelphia, and J Lovett Morse Boston vice presidents Dr Samuel S Adams Washington D C secretary Dr J Park West, Bellaire Ohio treasurer and Dr Walter Lister Carr, New York City, recorder and editor

The American Medical Library Association met at the hall of the Medical and Chirurgical Faculty Baltimore, May 25 Receipts for year $644 expenses $358 Six new libraries were admitted including the Bristol University Library, England The following officers were elected Dr William Osler, president, Mr John S Brown New York Academy of Medicine, vice president, Miss M R Charlton, McGill University Montreal secretary Dr George D Hersey, Rhode Island Medical Society treasurer Drs Osler and Jas C Merrill Mr Charles Perry Fisher executive committee It was decided that in order to join the Association a library must have at least 1000 volumes, and be open at regular hours to the medical profession A gift of 1000 volumes was received from the Philadelphia College of Physicians It was decided to issue a bulletin as often as material should accumulate and the interests of the association required it

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KENTUCKY STATE MEDICAL SOCIETY

Forty sixth Annual Meeting held at Louisville, May 22 24, 1901

The president Dr James H Letcher of Henderson, in the Chair

President s Address

This address was extremely interesting Among other things, the President suggested a complete revision of the Constitution and By Laws of the Society so as to have them more in keeping with present conditions The revision should conform as nearly as possible to the work of the AMERICAN MEDICAL ASSOCIATION The popular address was delivered by Hon Young F Allison of Louisville

Medical Organization

DR J N MCCORMACK Bowling Green read a paper on the necessity of medical education which was the report of the Committee on Public Policy He advocated the formation of medical societies in every county and state in the Union Every physician in this country should at least be a member of his county society in order to strengthen his profession and give it a standing in the community From each local society delegates are to be selected to attend the county society, from the county society delegates should be selected to attend the state society and from this delegates to the meeting of the AMERICAN MEDICAL ASSOCIATION He urged the adoption of the plan of organization outlined by the AMERICAN MEDICAL ASSOCIATION

The Society endorsed the report of Dr McCormack and moved the appointment of a committee on organization

Conduct of the Second Stage of Labor in Private Practice

DR EDWARD SEIDEL Louisville, read a paper with this title He dwelt on the necessity of exercising the strictest aseptic precautions in this work and described his method of preparing the patient bed nurse and himself In place of the usual absorbent pad he uses a bag containing one half bushel of bran which possesses great absorptive power The use of chloroform during pains lessens the liability of perineal tears Immediately after birth he places the child across the abdomen of the mother In this position it is not only out of the way but by its weight also exerts some influence on uterine contractions He exhibited a small obstetric case devised by him, which contains all the necessary material for conducting labor on an aseptic basis

Some Interesting Experiences in Obstetrics

DR W E SLEEP, Midway, reported three unusual cases After the birth of a still born baby the placenta was found to contain another child the development of which had ceased at about the third month The second case was complicated by an hourglass shaped tumor just beneath the pubic arch The patient was successfully delivered and recovered without complication Six months afterward the growth had entirely disappeared without practically any treatment In the third case four children had died successively from icterus neonatorum An autopsy on the last child revealed a complete abscess of the common bile duct

Miscarriage and its Treatment

DR W D GOSSETT, Louisville urged that the term abortion be limited to those cases in which there was criminal interference and that the term miscarriage be used to designate emptying of the uterus before the viability of the child The entire subject of miscarriage was very carefully reviewed and special attention was called to ascertaining positively that the uterus has been entirely emptied of its contents The curette should be used when necessary, but only under the strictest antiseptic precautions The essayist believes that curetment is usually looked upon as a simple procedure In his opinion it is an extremely grave one and should be performed by men who have had some experience in the use of the curette

The Puerperium

DR JOHN G CECIL Louisville, considered the management of this state Strict asepsis, complete rest and diet are essential All meddlesome interference should be abstained from The routine administration of ergot and practice of post partum douching are designated as most "pernicious" They should be used only when there is a positive indication for them, and then by a competent person The same applies to the use of the curette The abdominal binder should always be applied as a support to the relaxed abdominal wall and a stimulus to uterine contractions

Instrumental and Operative Obstetrics

DR A P MCCORMACK, Bowling Green dwelt upon the necessity and importance of making frequent examinations of the urine and taking pelvic measurements Podalic version should invariably receive the preference over mechanical interference Forceps should rarely be applied before the head is engaged, except when rapid delivery is necessary Symphyseotomy should never be done as an emergency operation It is unsafe, unscientific and frequently followed by disastrous results When indicated Cesarean section should be promptly performed The various obstetric operations are considered in

detail The indications and manner of performing them are fully described The vaginal tampon is condemned He especially advises the careful inspection of the genital tract after labor and the immediate repair of any cervical or perineal laceration Both the eye and finger should be used in looking for these tears

The Clinical Examination of the Blood in Diagnosis

Dr L B Cook Stanford dwelt on the importance of blood examinations The pathology of the blood was described in the following diseases anemia, pernicious anemia chlorosis and leukemia The Widal reaction was described and its significance given The various animal organisms found in the blood especially malarial protozoon are fully described

Substance of Cell Life and the Germs Considered from the Standpoint of Natural Phenomena

Dr Urban V Williams Frankfort presented this paper It was largely metaphysical dealing with the origin of all matter and the forces and conditions necessary to convert the original matter into the different kinds now found Its relation to disease is also considered

Typhoid Fever in Infancy

Dr James B Kinnard, Lancaster, called attention to the great difficulty in making a diagnosis of this disease in children He advocates the unrestricted use of water, internal and external, but restricts the diet to milk either the mother s milk or peptonized milk Antipyretics should only be used when the baths fail to reduce the temperature Complications are treated symptomatically as they arise

A Few Rambling Thoughts on Infant Feeding

Dr Henry F Tuley, Louisville, said that there is no substitute for healthy mother s milk The nearest approach to it is cow's milk It is cheap always obtainable, and capable of modification The successful use of cow's milk is dependent on the clear understanding of its modification by the percentage method Raw milk is superior to sterilized or pasteurized Every precaution should be taken during the milking process and the delivery of the milk so as to keep it pure and sweet Carefully watching the stools sleep and wake of the infant is essential to the proper appreciation of its progress Regular feeding is important The mother should avoid everything tending to affect the flow or quality of the milk Barley water rice water or flour ball water, dextrinized are the best diluents The percentage of fats, proteids and carbohydrates must be governed entirely by the progress of the child

Cure for Enuresis

Dr Philip F Barbour Louisville reviewed at some length the etiology, symptoms and treatment of this affection

Hip Joint Amputation—Report of Case

Dr W O Roberts, Louisville, gave a brief résumé of the various operations devised and also the methods for controlling hemorrhage, which is the chief element of danger in this operation He advises the unlimited injection of normal salt solution as it stimulates the heart and respiratory centers Amputation should not be deferred, as that lessens the chance of recovery A case was presented in which hip joint amputation was performed according to Wyeth's method

Sterilization of Suture Material

Dr August Schachner, Louisville, spoke on the frequent occurrence of infection from suture material and ligatures Therefore, the utmost vigilance should be used in having the sutures and ligatures, especially the catgut, absolutely sterile The Cumol method of sterilization is probably the best The author presented a metal cup devised by him for the sterilization and carrying of suture material It is absolutely non breakable and completely air tight, effectually obviating the danger of infection It can be easily carried about, and is therefore especially serviceable in country practice and in military surgery

Ventral Hernia, Its Prevention and Cure

Dr Louis Frank Louisville, said that perfect technique and strict asepsis should make the occurrence of ventral hernia an impossibility, except in those cases where it is impossible to procure absolute asepsis All ventral hernias, even the congenital variety, are curable either by the application of a suitable bandage or by operation The writer believes that excessive omental development is a factor in the production and maintenance of congenital hernia, therefore, he invariably removes quite a bit of omental tissue He reports a number of cases operated on, describing his method in full, none of which have had a recurrence of the hernia

The Management of Abscesses of the Antrum of Highmore

Dr M F Coones, Louisville, said that the most important thing in treating these diseases is to maintain thorough drainage as the secretions rapidly decompose The opening should be made sufficiently large for this purpose and the application of such antiseptics as will rapidly bring the disease under control Gauze drains are preferable to drainage tubes, which are really worthless The canine fossa to the place of election for opening the antrum

The Ophthalmoscopic Diagnosis of Bright's Disease

Dr Dudley S Reynolds, Louisville, said this is sometimes of great importance but requires expert judgment and can never be made until the renal disease has reached a dangerous stage Failing vision is the first symptom, and leads the patient to seek relief Few persons with retinitis albuminurica live beyond twelve months from the beginning of the affection Fatty deposits in the retina, presenting a series of radiatory striations around the macula with some deposits in other parts of the retina and occasional disseminated hemorrhagic effusions with tortuous retinal arteries are never seen without co existing renal disease

The Pathology of Bright's Disease

Dr Geo E Davis Lawrenceburg, after a review of the histology and physiology of the kidney, considered the pathologic changes in structure and function which produced the symptoms of albuminuria, dropsy and uremia

Dr Andrew Sargent, Hopkinsville, briefly mentioned the most important diagnostic features of acute and chronic Bright's disease

Dr A G Blincoe Bardstown dwelt on the importance of rest and a strict milk diet The symptoms should be treated as they arise

Dr L L Solomon, Louisville described in full the dietetic, hygienic and medicinal treatment A special stress was laid on the indications and contraindications of drugs in this affection

Analgesia by the Spinal Subaracnoid Injection of Cocain

Dr J Garland Sherrill, Louisville gave a full history of the origin of this method and also the manner of carrying it out The principal points to which the author called attention were, first the dangers shock due to the injection of the cocain, danger to the cord and centers in the medulla action of cocain on the heart, the immediate danger of meningitis and myelitis from infection occurring through improper aseptic precautions The arguments for the method are 1, the condition of the patient is much better after its use than after the use of a general anesthetic, 2, it can be used in many cases in which a general anesthetic is contraindicated, in fact dangerous, 3, it simplifies the operation considerably, 4 it lessens the patient's fear and therefore keeps him in much better condition, lessening the danger from shock The following are the objections to the method 1, an individual idiosyncrasy to cocain 2, the method is claimed to be a dangerous one by those who have either never used it or used it improperly, so that complications have resulted

Dr J G Carpenter, Standford, read a paper on "Appendicitis—Early Operation from a Pathologic Standpoint"

Stricture of the Male Urethra

Dr Henry H Kohler, Louisville, gave a very full and careful résumé of all the present methods of treatment of this condition He believes that the method of extensive dilatation is followed by no evil consequences and is the only one

by means of which we can clean the canal of its latent foci of gonococci The steel sound should be used, and the method is applicable to strictures in any portion of the urethra Strictures not responding to dilatation can be cured by an internal or external urethrotomy or a combination of both, or by forcible dilatation according to the method of Holland and Perrive or by progressive dilatation according to Le Forts method The strictest antiseptic precautions must be observed no matter which method is used A careful urinalysis should be made in all stricture cases Metallic dilators are to be preferred as they are more easily kept clean Urotropin, in 5 to 10 grain doses, is the best internal antiseptic

Urethroscopy

DR WM R BELL, Louisville gave a detailed description of the indication and uses for the urethroscope This instrument has simplified the diagnosis as well as the treatment of urethral and bladder diseases most decidedly We can now easily treat mucous patches urethral chancroids, hypertrophied follicles abscesses strictures, etc The most satisfactory instrument is that of Scholl, which allows the urethra to be studied as a cylinder and not as a collapsed tube He advised that plenty of time should be taken in making an examination with the urethroscope as many failures are due to hurried examinations

The Necessity of Medical Organization

DR J N MCCORMACK, Bowling Green dwelt upon the urgent necessity for the medical profession of the various states in this country to perfect their organization He advocated the formation of medical societies in every city and county in the state That each local society send delegates to the county society, and that each county society send delegates to the state society, which is to elect the delegates to the AMERICAN MEDICAL ASSOCIATION He believes that it will do away with much of the petty jealousy now existing among physicians everywhere not only in the city but in the country as well In union there is strength and every step should be taken to effect that union by making every physician in this country a member of some medical society This paper was fully discussed by Dr J M Mathews who handed in the resolutions referred to in THE JOURNAL of June 1, p 1573 Drs Richmond Reynolds Weidner Vance and Godshaw also took part in the discussion which was closed by Dr McCormack

The Practical Management of Smallpox

DR N K ALLEN Louisville referred to the legislation passed in this state as to vaccination and described the proper method for performing it He also called attention to the immediate isolation of all cases the proper disinfection of the habitation and the vaccination of all persons exposed to the disease

DR ANCIL D PRICE Louisville, read a paper on 'The Imperative Necessity of General Vaccination

Gunshot Wound of the Right Lung with Complications

DR A M MORRISON Goshen cited a case of a gunshot wound of the right lung which was followed by an empyema and finally to recovery This was complete except for occasional prolonged paroxysms of coughing, which sometimes threatened suffocation About a year later the boy was taken with an exceptionally violent fit of coughing during which he coughed up a strip of gauze which had originally been packed into the wound made in treating the empyema After this gauze had been extruded complete recovery followed

Report of two Cases of Aneurysm

DR J I ATKINSON Campbellsville reported an aneurysm of the ulnar artery and one of the femoral artery, just below Hunter's canal In both cases the vessels were ligated the cavities opened and emptied of clots The patients recovered without any untoward symptoms

DR BASIL M TAYLOR Greensburg The author protested against the use of stimulants and milk in "typhoid fever,' and pleaded for the treatment of the patient and not of the disease Several cases are recorded in which his treatment is outlined in detail and all of which made an uneventful recovery

Tuberculai Peritonitis

DR BEN CARLOS FRAZIER, Louisville, gave a complete review of all the literature of Tuberculai Peritonitis' and described in full the nature of the affection The various methods of treatment are dwelt upon and the necessity of prompt surgical interference is urged

DR J LIVELY JOHNSON, Louisville read a paper on "Ununited Fractures and their Treatment"

Surgical Emergencies from a Medico Legal Standpoint

DR C C GODSHAW Louisville, narrated a case of surgical emergency which he was called to attend by the foreman in the factory where the injury was inflicted The payment of his bill was refused by the company on the grounds that he was not called by them All attempts to collect the bill proved unsuccessful and the author finally resorted to legal means to force collection The opinions of the various courts before which the case was tried are given in full It was finally lost on the ground that the foreman of a factory has no right whatever to obligate his employers to the payment of any bill

Surgical Treatment of Inguinal Hernia

DR J T DUNN Louisville, advises the selection of a method which in the individual case is the most applicable and the least complicated Personally, he favors the Bassini method, which has materially reduced the occurrence of relapses and the mortality rate from this disease This, as well as all the other surgical methods devised, is described in detail by the writer

DR T B GREENLEY Meadow Lawn, read a paper on "The Longevity of the People of 70 Years and over Living in the Valley below the City of Louisville called Pond's Settlement, within the last half century' It is a paper dwelling especially on the fact that in spite of the frequent and constant occurrence of malaria in the districts referred to, the majority of people over 70 years of age in the State of Kentucky have lived in this district He does not attempt to explain the reasons for this fact

Election of Officers

The following officers were elected for the ensuing year Dr T B Greenley of Meadow Lawn president, Drs Geo F Reddish, of Summerset and D L Coleman of Lexington, vice presidents, Dr Steele Bailey of Standford, secretary, Dr Charles W Atkin, of Flemingsburg treasurer, Dr Frank L Lapsley of Paris, librarian, Dr Frank Boyd of Paducah, chairman of the committee on arrangements Paducah was selected as the next place of meeting the fourth week in May

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NATIONAL CONFEDERATION OF STATE MEDICAL EXAMINING AND LICENSING BOARDS

Eleventh Annual Meeting, held in the House of Representatives, St Paul, Minn, June 3, 1901

President Dr J N McCormack, of Bowling Green, Ky, in the Chair

Report of the Committee on Interstate Reciprocity and Uniform Medical Legislation

DR EMIL AMBERG read this report and said that the first step toward interstate reciprocity and uniform medical legislation must be established in the various political divisions by forming the medical law so that interstate reciprocity is allowed The second step consists in establishing the standard for physicians who are permitted to practice The third step consists in an arrangement by which the findings of one board may be accepted by another board

The committee reported with satisfaction that the progress along all lines mentioned had been satisfactory during the last year In regard to the first point the committee reported that the law permitted reciprocity in the following political divisions District of Columbia Delaware Illinois, Indiana Kansas Maryland Michigan New Hampshire New Jersey New York Ohio Pennsylvania Virginia Washington and Wisconsin Concerning the second point the Committee noted with satisfaction progress in Indiana and Washington

With reference to the third point, the New England states showed that the division into groups is practicable and desirable

The demand for uniformity of medical education is apparent The establishment of uniformity is possible It can be established through the examining boards aided by the profession and by the public

The committee came to the following conclusions

1 The acceptance by the weaker divisions without examination of applicants from states having higher requirements without demanding reciprocal recognition and the discrimination of medical boards against inferior schools in their own states reveals a commendable spirit

2 As a step towards interstate reciprocity the committee commended the action already begun of reciprocal arrangements and agreements between the boards of the several states having laws which provide for reciprocity and whose requirements are similar This will result in the formation of groups of states with established reciprocity

It is recommended that the members of the confederation from states in which the standard of requirements is not yet sufficiently high use faithfully the argument that interstate reciprocity can be obtained for the practitioners of that state only upon the basis of such legislation as will bring the standard up to that required in the states with which they intend to establish reciprocity The three principal points considered were 1 That the law in any political division should require or authorize the examination of all applicants for license by a competent examining board 2 That to be eligible to examination the applicant should be required to furnish to the examining board evidence of having graduated from a reputable medical college in good standing with the board in the state in which said college is located and with the board to which application is made 3 Examinations should be uniform throughout the states as to subjects or branches upon which examination is required

The committee believes that it would be well for the confederation to agree upon the branches upon which applicants should be examined to the end that uniformity of requirements by the various boards may be attained and that the percentage required in each subject and the manner of conducting the examinations together with the rules to be enforced in each examination, should all be uniform

The committee urgently recommended that reciprocity between the examining boards of the country on all questions pertaining to the welfare of the public and the elevation of the profession be maintained To this end there should be the fullest and freest communication between the boards which should not be limited to their official reports

Some Vulnerable Points in Medical Legislation

Dr HARVEY B DALE, of Oshkosh Wis followed with this paper and stated that the ultimate intent of medical legislation is unquestionably good Its motive is a laudable one It aims to directly benefit suffering humanity not to establish a doctors trust nor to stifle competition nor to strangle any practical new idea or system of treatment in its infancy Enforced unification of standards on the part of medical colleges would simplify matters It would result in a diploma being generally recognized for what it purports to be—a certificate of actual fitness to practice medicine It would enable the recognized graduate in one state to move into another at his own will It would remove all injustice and hardship now endured, not always patiently, by qualified physicians It would strike the Upas tree at its root instead of lopping off its branches It would do away with the manifest injustice to really qualified and honest college faculties, now inflicted by post mortem dissections of their deliberate decisions In a word, it would reduce the present complicated legislative machinery to a very simple and effective mechanism Given a concise, yet comprehensive definition of what constitutes the practice of medicine, a uniform requirement that all who engage in such practice should have a medical diploma and a legislative guarantee based upon actual information that such diploma says what it means and means what it says, quackery would find life a burden in this country The qualified physician of one state would be a qualified physician everywhere The pretender might travel from Maine to California and from California to Maine again, looking in vain for a chance to plunder the people

How Should the Practice of Medicine be Legally Defined?

Dr HENRY BEATES, Jr, of Philadelphia, read a paper presenting the following definitions for consideration

To Practice Medicine For anyone except those carrying out the directions of the attending physician to engage directly or indirectly habitually or occasionally, gratuitously, or for pecuniary or other compensation in the cure, management or treatment, by any means whatsoever, either material or immaterial, for the prevention relief or cure of any or all diseases, accidents or disability to which human or animal life is exposed, threatened or afflicted

Practitioner of Medicine Anyone, except those carrying out the directions of the attending physician who engages, directly or indirectly, habitually or occasionally, gratuitously, etc, as above

The Practice of Medicine The engaging by anyone, except those carrying out the directions of the attending physician, directly or indirectly, habitually or occasionally, gratuitously, etc as above

The above definitions were only offered in the nature of suggestions During a lengthy discussion the definitions were criticized several modifications suggested, but no action taken by the confederation committing it to any particular definition

Officers

The following officers were elected for the ensuing year President, Dr N R Coleman Columbus, Ohio, first vice president Dr Henry Beates, Jr Philadelphia, second vice president, Dr James A Egan Springfield, Ill, secretary treasurer Dr A Walter Suiter Herkimer, N Y, executive council, Dr William S Foster Pittsburg Dr Joseph M Mathews, Louisville, Dr William A Spurgeon, Muncie, Ind, Dr William Warren Potter, Buffalo, and Dr Augustus Kornderfer Philadelphia

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PHILADELPHIA NEUROLOGICAL SOCIETY

Regular Meeting

Dr Charles S Potts in the chair

Tea Intoxication with Spinal Symptoms

Dr ALFRED GORDON presented the patient, a woman aged 31 years who 7 years previously had had an operation performed for some condition of the uterus Since that time she has been accustomed to taking enormous amounts of tea, sometimes 15 glasses a day Her present illness seems to date back to three months ago at which time she began to complain of fatigue and unsteadiness in walking Increased knee jerk and biceps tendon reflex were present When the latter region was struck a distinct tremor could be produced in the hand The sphincters had also been involved Sensation was altered, and hyperesthesia was present over the lower extremities The pupils of the eyes were unequal, with hypermetropia and nystagmus There had been slight congestion of the optic disc On standing with the eyes closed, there was unsteadiness with a swaying backwards and forwards, or from side to side Some time ago she began to suffer from spells of unconsciousness lasting for a few moments She now complains of heaviness of the legs Nearly all the symptoms of unilateral sclerosis or hysteria are present In this case it is believed that the spinal symptoms are due to tea intoxication Cases of this kind do not seem to have received much attention during the past five years It should be remembered also, that to color tea sometimes lead is used It may be possible that some of the spinal symptoms existed previous to the time she began taking so much tea

Dr D J M McCARTHY had seen a case treated by Dr Charles W Burr, in which as much as 10 glasses of tea a day had been taken In this case the symptoms presented pointed towards sclerosis

Dr H A HARE called attention to several cases of lead poisoning which had occurred at a certain institution

and believed to have been caused by biting off and chewing the ends of black sewing thread In these instances the thread had probably contained large quantities of lead He also called attention to the fact that at the present time there was little if any caffein upon the market That which is generally sold as caffein is really thein Thein might produce different symptoms to that of caffein

Trichiniasis

DR J CHAMPLIN DACOSTA exhibited an interesting case of trichiniasis occurring in his service at the St Joseph's Hospital The history of this case was read by Dr Dorsett as follows The patient was a man of 20 years who when admitted to the hospital was complaining of pain in calf of the right leg The patient stated that last summer while on a bicycle trip he had sustained an injury to the right leg which caused bleeding A short time later the right leg began to swell and it became painful worse generally at night An operation had been performed by Dr DaCosta and a small piece of a muscle of leg removed The microscopic findings in this case were given by Dr Randle C Rosenberger as follows The specimen had been fixed in osmic acid and showed in specimens trichiniasis present In one microscopic field as many as 18 specimens had been found in some of which obliteration of the fibrous capsule was found The blood count showed hemoglobin 48 per cent red corpuscles 4 800 000 and the leukocytes 12 000 eosinophiles 4 per cent Eight days later the hemoglobin was 80 per cent red cells 4 275 000, leukocytes 17 600 eosinophiles 3 per cent Dr Dacosta then detailed the symptoms existing and noted especially that the disease was confined to the right lower extremity and seemed to only extend up as far as the thigh the rest of the body appearing to be free of disease The right leg was enlarged and each muscle stood out On palpation over the enlarged portions the consistency was like that of rubber He was free to confess that the diagnosis could not be made from the clinical symptoms Trichiniasis had been considered but had been excluded by himself and other colleagues

Severe Anemia with Changes in the Spinal Cord

DRS WM E HUGHES and WM G SPILLER reported a case of this kind Dr Hughes in detailing the cases stated that the patient had been 63 years of age with previous negative history Five years ago he had suffered from a mild case of sunstroke from which he recovered When seen there was some puffiness of the eyelid slow full pulse and systolic cardiac murmur transmitted into the axilla Some crackling rales were also present The eyesight was almost totally destroyed Urine was normal The red corpuscles had numbered 780 000, and the hemoglobin was 26 per cent Normoblasts and megaloblasts were present The temperature had remained practically normal Dr Spiller stated that sclerosis was never pronounced in the upper portions of the lateral columns in these cases In this instance the anterior and posterior roots were not degenerated Taylor in 5 cases examined, had found alterations of the blood vessels in two instances but no general arteriosclerosis Drawings were then passed around showing the changes found in the cord

DR J HENDRIE LLOYD was much interested in these changes found in the cord It might be that they were produced by toxins circulating in the blood As to ascending degeneration, he had seen the condition occur in a case of syringomyelia

DR CHARLES W BURR had studied 7 cases of pernicious anemia with spinal cord symptoms In these instances alterations had been found mostly in the posterior regions of the cord He was confident that without visual changes in the cord symptoms referable to the cord might exist and it was his opinion that the condition which gives rise to the changes in the blood also produced the changes in the cord

DR CHARLES K MILLS believed that it would be best to designate these cases acute toxemia rather than pernicious anemia

Secondary Suture of Posterior Interosseous Nerve

DR W W KEEN read a paper entitled Report of a case of secondary suture of the posterior interosseous nerve with complete restoration of function The speaker believed that this case was the first one of its kind on record since a thorough search in the surgeon general's office and elsewhere had not revealed a similar case The history was as follows The man while cutting down a tree accidentally dislodged the axe which struck him in the forearm and completely separated the interosseous nerve The wound was bandaged without uniting the ends of the nerve and healed promptly It appeared that the ulnar and radial nerves were not injured Dr Wharton Sinkler had made an examination and noted the condition Three months after the accident Dr Keen made an incision over the seat of injury and had found the two ends of the nerve The tip ends of the two were cut away after which they were united and within eight days sensation returned and two months later complete recovery occurred The speaker also detailed a case in which he had united the cut ends of the radial and ulnar nerves with recovery of function

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NEW YORK COUNTY MEDICAL ASSOCIATION

Stated Meeting, May 20 1901

The president Dr Parker Syms in the chair

Prostate Removed by Perineal Prostatectomy

DR PARKER SYMS presented this specimen removed by operation on Jan 24 1901 from a man of 62 years His method consists in doing away with the suprapubic incision and by the use of a rubber inflatable bulb and drainage tube so controlling the prostate that it can be readily enucleated He had operated on nine cases in this way without any mortality, and with complete restoration of the function of the bladder, save in one instance He commended this operation because of its freedom from danger

DR J W S GOULEY said that he had always been opposed to the use of a suprapubic incision in these cases, believing it to be a needless complication

The Vaginal Compared with the Abdominal Route in Surgical Treatment of Pelvic Diseases

DR J RIDDLE GOFFE presented a paper on this subject He advised the vaginal route in all cases in which it could be used with equal safety and success as abdominal section, because it insured a more rapid convalescence and freedom from hernia He considered vaginal hysterectomy to be the only operation for cancer of the body of the uterus The vaginal operation was appropriate for all simple ovarian cysts no matter what their size, because after being tapped and allowed to collapse they could be easily removed Retroversion of the uterus, being a condition which would not justify a dangerous operation, should be treated by operation through the vagina Alexander's operation was very liable to be attended by infection or followed by hernia and was absolutely contraindicated when the retroversion was complicated by disease of the appendages or by the presence of adhesions While ventral fixation would certainly cure retroversion, it necessitated an abdominal section with the attendant weakening of the abdominal wall and tendency to hernia Through the vaginal incision the malposition of the uterus could be rectified and the round ligaments shortened Most of his vaginal work was done through the anterior fornix and in order to secure the necessary space he makes a longitudinal incision as well as a transverse one Myomectomy for tumors which do not reach above the true pelvis was perfectly feasible through the vagina, larger ones were best treated by abdominal section

DR WILLIAM R PRYOR thought vaginal hysterectomy for cancer of the uterine body was an absolute failure but he had found it possible to relieve a very large percentage of the women coming to him with fibroids by operating through the vagina He preferred to make the incision in the posterior cul de sac, not only because it inflicted less traumatism but because better drainage was thereby secured As he believed fibroids were connected with a diathesis and that if operated upon at all they should all be removed most thoroughly, he did not favor myomectomy The most important advantage of the vaginal route was the opportunity it offered for making exploratory incisions without detriment to the patient

Dr A Brothers said that he had done about one hundred by each of the routes under discussion and as a result of this experience was inclined to think that operations done through the vagina were rather difficult and should not be undertaken by other than experts They must necessarily be done in a narrow space and in a field more or less obscured by blood He did not consider the vaginal route the one of election in most cases of suppurative disease in the pelvis

Dr Edwin V Dieffenbach remarked that the mere opening of the abdomen was attended by far more shock than an incision through the vagina

Penetrating Gunshot Wound of the Abdomen without Injury to the Abdominal Contents

Dr Henry Roth in this paper briefly reviewed the literature, and reported a case of this kind coming under his observation in the hospital service of Dr Parker Syms His patient was a boy of 10 years who had accidentally shot himself in the abdomen near the umbilicus with a revolver On admission to hospital the next day he had had a temperature of 100 6 F a pulse of 100 and 22 respirations per minute An exploration of the abdominal wound had been made under ether and a perforation discovered in the peritoneum but the most diligent search had failed to show any wound of the abdominal contents The boy did well and was about to be discharged when a small swelling under the skin of the abdomen about six inches to the left of the bullet wound had attracted attention and had proved to be the bullet This was readily extracted The speaker went on to say that in civil surgery it was the rule that a bullet wound of the abdomen should be carefully explored as soon as possible and after all preparations had been made for a laparotomy The experience gained in the late Spanish American war demonstrated that a large number of persons with gun shot wounds of the abdomen had recovered without operation but it must not be forgotten that the large proportion of those so injured died on the field

Dr J W S Gouley said that he had seen in a dissecting room subject a bullet incysted in the mesentery without any evidence of injury to the coils of intestine

Dr A Ernest Gallant said that it had been his experience that the gunshot wounds that do badly are as a rule those which have been subjected to a good deal of previous probing Abstaining from such interference and the prompt application of antiseptic dressing would best promote quick and satisfactory healing

OHIO STATE MEDICAL SOCIETY

The Fifty sixth Annual Meeting held in Cincinnati, May 8 10, 1901

The president Dr Frank W Bain of Kenton in the chair Dr E Gustave Zinke chairman of the Committee of Arrangements made the address of welcome Dr Bain responding After the nominating committee had been named, the society proceeded with the reading of the papers

At the conclusion of the afternoon session a letter was read from the Dayton Academy of Medicine asking that that society be made an auxiliary of the State Society another letter was read from the Ohio State Pediatric Society asking that their organization be absorbed by the state society

Limitations of Medical Therapeutics

Dr Frank Billings delivered the address in medicine entitled as above during the evening session He stated that therapeutics had not shown the rapid advances of late years that had been made by her sisters pathology and medical diagnosis The practitioners of to day, as far as the treatment of disease is concerned could be divided into three classes The therapeutic nihilist who sees no virtue in any drug, the theorist, who treats diseases and not individuals the rationalist, who bases his practice of therapy upon scientific knowledge with an ability to diagnose disease In his closing remarks, the essayist spoke strongly against the use of drugs with copyrighted names and inferred that the major portion of the sick could be more quickly benefited by a close adherence to sanitary laws in food clothing and general surroundings than by drenching with medicines

Dr C A L Reed president of the American Medical Association held a gynecological clinic at the Cincinnati Hospital on the second day

The following officers were elected for the ensuing year President Dr L C Brush of Zanesville first vice president, Dr E Gustave Zinke of Cincinnati second vice president Dr S S Halderman of Portsmouth third vice president Dr J C M Floyd of Steubenville fourth vice president, Dr W S Philips of Belle Center treasurer Dr J A Duncan, of Toledo, secretary Dr P Max Foshay of Cleveland Dr Foshay was also appointed editor of medical literature The following committees were appointed Finance, Dr J C Oliver, of Cincinnati ethics Dr F W Blake, of Columbus, publication, Dr J Snodgrass of Kenton,, legislation, L B Tuckerman, of Cleveland and F C Martin of Cleveland, admissions and medical societies Dr T M Wright, of Troy

Dr John A Wyeth of New York delivered, during one afternoon session the address in surgery 'A Surgical Operation

The annual banquet of the society was held at the Phoenix Club about three hundred physicians attending Dr Dan Millikin of Hamilton acted as toastmaster and addresses were given by the following Influence of the Physician in Public Affairs by Dr F C Brush "Medical Legislation" by Dr L B Tuckerman "The Lawyer and the Doctor," by Judge Moses F Wilson 'American Medicine, by Dr C A L Reed 'Social Amenities of Medical Societies, by Dr W C Chapman 'Meditations on a Well Spent Life" by Dr Thad A Reamy

The meeting was a success in every way one of the unusual features being that with but three or four exceptions the papers were read as advertised The next meeting of the society will be held in Toledo next May

The following resolutions were adopted

Whereas The enormous increase in the Membership of the American Medical Association renders it increasingly difficult to transact the necessary legislative work of the Association in the General Sessions

Resolved That we recommend that the delegates of the Ohio State Medical Society use their best endeavor to secure such an amendment to the Constitution of the American Medical Association as shall transfer the business of the Association to a special section so constituted as to fairly represent the several State Societies and the scientific Sections and small enough to properly transact the business

AMERICAN ACADEMY OF MEDICINE

Twenty sixth Annual Meeting held at St Paul, Minn, June 1 3, 1901

(Continued from page 1654)

SECOND DAY

Abuses of Institutionalism

Dr Eugene G Carpenter of Columbus stated in regard to institutionalism that it is an outgrowth of organization and is the result of routinism Routinism it was declared develops perfunctoryism which in turn leads to automatism differing little from that which is mechanical That which is mechanical moves in fixed lines and is consequently opposed to progress Too often the institutionalist is dominated by the institution The true institutionalist, however, remains the master of the institution The executive of the institution sets the pace for the other participants of the organization The policy, therefore should be broad and liberal

Advantage of Civil Service Principles in the Conduct of State Hospitals for the Insane

Dr Gershom H Hill superintendent of the Iowa State Hospital for the Insane in this paper treated of the benefits resulting from the system and underlying principles in having a board of three in control of the state institutions of Iowa in practice two and a half years It was shown that the system was free from political influence A careful supervision is had over the expenses of supplies In the hospital under Dr Hill s supervision the personal element in the

treatment of patients is preserved and there is no interference with individually approved ways of treating patients A medical society is held in connection with the hospital, scientific papers are read and discussed and a quarterly bulletin published Contributions are solicited from other institution men in Iowa and other states Solicitation on the part of the board for the selection of an employe is counted a misdemeanor It is the distinction of the board of control law to do the business of the state institutions on the same principles and methods used by the United States Government in buying supplies or by the up to date business man The tendency is for the legislature to trust the board of control to adopt their recommendations and to appropriate all the money asked for as the resources of the state will permit Merit is the criterion in selecting help The result under these civil service rules is to secure perfection as nearly as possible

Need of National Co operation in the Establishment of Sanatoria for Tuberculosis

DR A MANSFIELD HOLMES of Denver detailed the advantages of sanatoria in that they increase the chances of recovery afford an opportunity for rigid sanitary regulations among patients and furnish a means of educating those infected, and the public against sources of infection He divided the varieties of sanatoria into three classifications for patients of limited means for those of moderate means and for the well to do The methods of conducting sanatoria were outlined under the purely charitable institutions cooperative institutions and those conducted for profit In considering the location of the sanatoria there should be for the incurable cases sanatoria located near large centers of population regardless of climatic conditions for the incipient cases the most favorable climatic conditions should be chosen for the location of the sanatoria Cooperative sanatoria established on the proper plan would in the author s opinion overcome many of the present difficulties

Evils in Institutions

DR ALBERT GOLDSPOHN of Chicago spoke on Evils in some Asylums Hospitals Infirmaries and Training Schools for Nurses that might be avoided by placing them under Civil Service Rules and by Proper Requirements Regulations and Inspections on the part of a properly constituted and authorized Board of Health in each State contending that many of these institutions did not yield their intended degree of usefulness because of too exclusively lay management and lay selection and appointment of medical men which very frequently resulted in the appointment of inferior men A still greater evil frequently occurred in the public hospitals and asylums that were under political influence Many governors, county commissioners etc regarded medical appointments, like all others, as something with which they had a right to reward their political henchmen who among physicians were generally of an inferior grade professionally He advocated giving the state boards of health the additional duties powers and emoluments of a medical civil service board that this board should select and submit all the candidates for political medical appointments that it should oblige laymen trustees of private or denominational hospitals etc to have their candidates for medical positions selected by some creditable local medical society that it should determine the fitness of all superintendents and matrons of hospitals and license them for such positions and that a representation of such a board should examine or inspect every such institution at least once a year

Hospitals and Sanatoria Founded, Owned and Controlled by the Medical Profession

DR H PERT ELLIS of Los Angeles stated that hospitals may be divided into three broad classifications charitable, private and hybrid class where private wards and free beds are mingled for the pecuniary gain of the hospital The description of a hospital owned and controlled by physicians is given It is the outgrowth of a corporation known as the California Hospital Company The first building erected for the hospital was soon found to be inadequate and was added to At present the hospital owns a corner property 323 by 1851 feet Patients select any reputable physician and pay him for services Every physician prescribes for and operates upon his patients as if in the patient's own home, and prescriptions are filled at the drug store Connected with the hospital is a training school for nurses The absolute management of the hospital is vested in a board of nine directors elected annually from among the stockholders The plan of the management is recommended to Eastern confreres because the construction of the building and the hospital service are entirely in accord with the desires of the physicians patients realize that they are in a hospital controlled and partially owned by their own physician which insures confidence and whatever profits accrue from the hospital revert to the physician thus giving safe investments In the opinion of Dr Ellis it is as essential that the profession own and control the hospitals and sanatoria as that they should own and control their medical journals in order to keep them as free as possible from commercialism

A Suppressed Educational Problem

DR JAMES L TAYLOR, of Wheelersburg, Ohio urged in this contribution an enlightened 'natural selection in lieu of the ignorant haphazard methods of selection among people which result so generally in physical as well as intellectual deterioration

The Relation of the Clinical Laboratory to Its Hospital.

DR HENRY W CATTELL of Philadelphia, presented a paper under this title in which he takes for granted that the time has gone by when it is necessary to argue for the existence of a clinical laboratory in connection with a hospital The questions to be considered in the internal administration of a hospital are the relations of the clinical laboratory to the board of managers the medical and surgical staff the chief resident physician, the resident physicians the superintendent the nurses the out patient department, etc Questions such as these should be asked, discussed and answered How shall the laboratory be built equipped and conducted? Shall there be a laboratory attached to each ward a general laboratory or a combination of both? Shall the director and his assistants be paid for their work? What relations shall exist between the laboratory worker and the clinician What are the usual causes of friction arising from the new state of affairs? Should the members of the staff be expected to bring urine, sputum blood etc of their pay patients both in and out of the hospital and make the laboratory make these examinations free of charge? Shall original investigations be carried on in such laboratories? Shall the workers in the laboratory be permitted to perform and to charge for work received from their own patients or from those desiring such services for money?

From a personal experience extending over a period of twelve years and from an intimate connection with a number of hospitals in various capacities, Dr Cattell gives his personal views in regard to the answers to some of these questions

DR W W KEEN, of Philadelphia said he was glad indeed to have heard the paper of Dr Cattell He was less interested perhaps in the clinical laboratory from the administrative point of view than from the scientific and surgical He emphasized the statement that it was granted that at the present time every hospital small and large should have a clinical laboratory and more than that such a laboratory finds a large field of usefulness which in ten or twenty years would be doubled or even tripled

Necessity for Revising Medical Fees

DR P MAXWELL FOSHAY of Cleveland stated that the custom of charging a fixed sum for each visit was a relic of antiquity and illogical Other callings are differently regulated, as is also the special practice in the profession The author thinks there is every reason in the world for the general practitioner to proportion his charge in all cases to the value of the service rendered and to the ability of his patient to pay The need of a fee bill is stated to establish a standard agreed upon by physicians in their societies to which the profession can appeal when dealing with patients This also is

of definite service in court when suing to recover the amount of a bill

A greater object urged for this new method is its means of checking to some extent the pernicious custom of giving "commissions" No present retrogressive tendency in the evolution of the medical profession is at present so strong as this of the physician dividing fees behind the patient's back

Refraction

Dr James A Spalding of Portland Me gave a personal experience of an ophthalmologist suffering from a sudden loss of vision and consulting first the optician and then the oculist for aid showing the inefficiency of the former and the great help which the latter gave to him In view of this Dr Spalding asks would it not be preferable for the profession to address the public through the public press regarding all sorts of ailments thereby preventing them accepting the beguilements of charlatans Physicians, too ought to be careful in referring their patients only to those who have a proper knowledge of disease An increase in the solidarity of the profession is needed

Dr Fuckerman, of Cleveland and Dr Risley, of Philadelphia referred to cases in which grievous damage had been done through failure of the patients to be referred to an oculist rather than to the advertising optician

Election of Officers

The following new officers were elected President Prof V C Vaughan first vice president Dr James L Taylor of Wheelersburg Ohio second vice president Dr W A N Dorland of Philadelphia third vice president, Dr H P Ritchie of St Paul 4th vice president Dr H Bert Ellis of Los Angeles Cal secretary and treasurer Dr Charles McIntire of Easton and assistant secretary Dr A R Craig, of Columbia, Pa

Therapeutics

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice Proper inquiries concerning general formulae and outlines of treatment will be answered in these columns]

Bromidrosis (Offensive Sweating)

Bromidrosis is usually confined to the axilla or to the soles of the feet This form of sweating generally occurs in patients who demand tonic treatment When there is much sweating the following formula is recommended

℞ Acidi sulphurici aroma ʒvi 24
Aquæ q s ad ℥iv 128
M Sig *One teaspoonful in wineglassful of water three times a day*

The following is advised by Crocker

℞ Pulv cretæ comp ʒvi 24
Pulv cinnamomi comp ʒii 8
Sulphuris præcip ʒi 32
M Sig One teaspoonful to be taken twice a day

Treatment of Favus

Dr E H Moore states that when the patches are scattered it is advantageous to practice thorough epilation The patches should be kept saturated for one or two days with oil of ergot, and then thoroughly sponged with a 25 per cent solution of boroglycerid In one or two hours the crusts will peel off, leaving a clean surface If a discharge is present after removal of the crusts the scalp *should be cleansed* with hot borax water, dried with a towel and then rubbed with the following ointment

℞ Cupri oleatis ʒss 2
Vaselini ℥i 32
M Sig To be well rubbed into the patches

A diluted tincture of iodin may also be used The surface must be kept clear of crusts, and the treatment is to be repeated until all the parasites have been destroyed When favus affects the body or limbs it can be easily removed by a few applications of the following

℞ Tinct iodi
Alcoholis, āā ℥i 32
M Apply locally to the affected parts

Hyperidrosis

The treatment of hyperidrosis must vary with the cause Local treatment in the milder forms of hyperidrosis is of great use and in many cases is all that may be required While insisting upon the treatment of the general condition, the following prescriptions may be found useful as recommended by Van Harlingen in "Twentieth Cent Practice"

℞ Pulv acidi salicylici
Pulv zinci carb precip
Pulv magnesiæ ustæ ʒiv 16
Pulv amyli ʒxv 60
Pulv cretæ ʒxx 80
M Sig For local application

AS A LOTION

℞ Acidi tannici ℥i 32
Alcoholis ℥viii 256
M Sig *Use as a lotion*

In hyperidrosis of the palms and soles he recommends washing them in carbolized solution, after which the following should be applied

℞ Unguenti picis (U S P)
Unguenti sulphuris (U S P) āā ℥ss 16
M Sig Spread upon cloths and keep in place with a bandage

The following is recommended by Hebra in obstinate sweating of the soles of the feet

℞ Emplast diachyli
Olei olivæ, āā ℥ii 64
M Sig Apply as an ointment after cleansing

A formula similar to the following is recommended by Ishoppe in bromidrosis of the axilla

℞ Zinci sulphatis
Ferri sulphatis, āā ℥ii 64
Cupri sulphatis ʒvi 24
Beta naphthol gr iv 25
Essentiæ thymi m x 66
Acidi hypophosphorici gr v 30
Aq destil O i 512
M Sig Apply locally as a lotion

The following has been recommended as one of the most efficient powders in hyperidrosis of the feet

℞ Acidi salicylici gr lxxv 5
Acidi boracici ʒiiss 10
Acidi tartarici ʒiiss 10
Zinci oxidi ʒvi 24
Talc præp ℥iss 48
M Sig Wash the feet with medicinal soap, and dust the powder into the stockings in the morning before drawing them on

The *Medical Press* recommends the following in hyperidrosis of the feet

℞ Menthol gr v 30
Acidi salicylici gr xv 1
Acidi thymi gr xv 1
Spts lavendulæ ʒvi 192
M Sig Wash the parts well dry and bathe well with the lotion

AS AN ANTISEPTIC ASTRINGENT

℞ Acidi salicylici gr xv 1
Sodii biboratis gr lxxv 5
Zinci oxidi
Talc præparatæ, āā ℥iss 48
M Ft pulvis Sig Sponge the parts well and apply the powder

Or

℞ Salol gr lxxv 5
Aluminis gr lxxv 5
Zinci oxidi ℥i 32
Talc præparatæ ℥ii 64
M Sig Apply locally

To Prevent Insect Bites

Meuse, in *Pharm Jour* states that a solution of quinin sulphate in glycerin is the best preventive against insect bites Whether this is due to the bitter taste of the quinin or to its toxic action on the insects has not been established

Nitrites in Brain Syphilis

Dr W Browning in *Med News*, states that the nitrites being the most powerful vasodilators are of great benefit in overcoming the tendency to the narrowing of the lumen of arteries especially in disease of the arteries supplying the brain After the vessels are dilated specific medication has a much better opportunity to gain access to the diseased parts He also finds the nitrites of value in diabetes of old syphilitics in conjunction with specific treatment He prefers to administer them by the mouth rather than hypodermically

Treatment of Asthma

Jackson in *Merck s Archives*, recommends the following, to be inhaled to check the attacks of paroxysmal dyspnea

R	Pulv pot nitratis	ʒi	20
	Pulv stramonii	gr lxxv	5
	Pulv lobeliæ	ʒiss	6
	Pulv belladonnæ	gr xlv	3
	Pulv grindeliæ	ʒiss	6
	Pulv hydrastis canad	gr xv	1

M Sig Burn one teaspoonful in a small closed room, and inhale the smoke

Sodium Salicylate in Gonorrheal Epididymitis

The internal administration of sodium salicylate is recommended by Pigot in the *Ann de Derm et de Syph* in those cases in which there is much pain, without extensive involvement of the spermatic cord and tunica vaginalis When the cord is involved belladonna and mercurial ointment is more effective

Urticaria

The following combinations are recommended by *Therap Gaz* in the itching of urticaria

R	Liq hamamelidis	℥ii	64
	Salis mitis	ʒss	16
	Aq destil	O i	℥12

M Apply locally

Or

R	Adipis benzoinatis	℥iv	128
	Cereæ albæ	℥ss	16
	Cetacei	ʒi	4
	Acidi borici	ʒss	2
	Glycerini	ʒi	4
	Aq Coloniensis	℥iiss	80

M Sig For local application

In rheumatic subjects the following is of value taken internally

R	Sodii salicyl		
	Potass bicarb ãã	ʒiv	16
	Aq menth pip q s ad	℥iii	96

M Sig One teaspoonful after meals in water

The following is recommended by *Merck s Archives* as a local application

R	Acidi carbol	gr xv	1
	Spts menthæ pip	m xv	1
	Zinci oxidi	ʒiii	12
	Lani	℥iss	48
	Vaselini	ʒi	32

M Sig Apply locally

Or

R	Menthol	ʒii	8
	Spts etheris		
	Spts chloroformi		
	Spts camphoræ ãã	ʒvi	24

M Sig Spray the affected part and dust with zinc oxid powder

Saline Baths in Disturbances of the Menopause

Cottschalk as noted in *Brit Gyn Journal* advocates the employment of hot saline baths at a temperature of 40 C, lasting for about twenty minutes to be taken every evening at bedtime as an excellent means of combating the night attacks of heat and sweating from which many women are troubled at time of change of life

Medicolegal

Seven Thousand Dollars for Death of Woman —The fourth appellate division of the Supreme Court of New York holds in the case of Smith vs the Lehigh Valley Railroad Company where a woman 49 years old was killed by a train, and she left a husband 48 years old and two sons, 21 and 18 years of age respectively, who were entitled to share the verdict, that a verdict for $10,000 damages was excessive, and should be reduced to $7000, or a new trial would be granted

Sufficient to Support Verdict Against Firm —In the case of Tillis vs Redus where it appeared that near the place a firm conducted a store one member of the firm operated a gin in which an employe of his got caught and was so badly injured as to require the amputation of an arm, and the man who telephoned for a surgeon testified that both members of the firm directed him to say that the firm wanted him to attend the wounded man, the Supreme Court of Mississippi holds that this testimony offered a sufficient foundation for placing the surgeon s claim against the firm for services before the jury, and of supporting a verdict in his behalf

Attending Physician on Mental Condition of Testator —The Supreme Court of California says that under section 1881 of the Code of Civil Procedure of that state a physician is precluded from being examined as a witness only as to the information acquired in attending the patient which was necessary to enable him to prescribe or act for the patient Consequently, it holds In re Black s Estate where it clearly appeared that the testimony of the physicians as to the mental condition of the maker of the will which was being contested was not founded upon any such information, that their testimony was not improperly admitted although they had attended the testatrix professionally

Rebuilding and Enlargement of Hospital Permitted —In construing the act of 1899 prohibiting the establishment or maintenance of additional hospitals in the built up portions of cities the Supreme Court of Pennsylvania held, in a decision reported on page 685 of THE JOURNAL of March 9, 1901 that the word "additional" referred to new buildings not already established and did not mean in addition to the total number then maintained in the whole of the city But in another decision in the case of Commonwealth vs the Charity Hospital of the City of Pittsburg the court now holds that, under that act not only may an existing hospital building be torn down and a new one constructed upon the same site, but that there may also be erected a larger building so long as that is done in the location in which the hospital was maintained prior to the passage of the act

Competent to Testify as an Expert on Insanity —A physician called as a witness in the murder case of the State of Washington vs Boyce said that he did not like the word expert , did not like to call himself an expert On the other hand he said that he considered himself enough of an expert on insanity to examine people, had even deprived them of their liberty in an asylum by his knowledge of insanity and that he had done it a great many times but that he was not a specialist on insanity And his whole testimony showed that he drew a distinction between an expert and a specialist In other words, while in the first part of his testimony he would not say that he was an expert saying that he did not like the word expert he did say that he was competent to testify as an expert The testimony as a whole the Supreme Court of Washington holds did not show that he was not competent to testify as an expert

Sufficiency of Proofs of Cause of Physician's Death —A policy of accident insurance issued to a physician contained the following clause This policy covers septic poisoning resulting

from accidental incision or abrasion of the cuticle, and the simultaneous infection thereof while the insured is performing a surgical operation or autopsy' It was conceded that the testimony produced at the trial was sufficient to sustain a finding by the jury that the insured died of septic poisoning, which resulted from an accidental abrasion of the cuticle while performing a surgical operation, and that the facts proved established a claim within the meaning of the policy But it was contended that the proofs of death furnished the company were not in substantial compliance with the requirements of the policy The Supreme Court of Pennsylvania says however, case of Brymer vs the Commercial Mutual Accident Company, that the only defect in the proofs which the most critical examination developed was that they did not show that the abrasion of the skin which made infection possible occurred during the operation which objection was not raised the only objection stated being that it did not appear that infection occurred during the performance of the operation, which objection was not well founded Under these circumstances the court holds the proofs sufficient as it thinks it might well be inferred from but the one objection last mentioned being raised that in all other respects the proofs were accepted as sufficient

Five Thousand Dollars for Injuries to Foot and Leg — In the personal injury case of Perrette vs the City of Kansas City the former caught his foot in a hole in a sidewalk was thrown upon the walk his leg broken the ligaments of his foot and ankle sprained and lacerated and the bones of his foot and ankle dislocated Bandages and splints were first applied the swelling being so great that a plaster of Paris cast could not be put on The inflammation around the injured parts became so great that gangrene set in and he was compelled to keep his foot in ice water four or five days during which time he suffered intense pain and was unable to sleep except under the influence of opiates A plaster of Paris cast was afterwards applied, which remained on about 40 days and he was altogether confined to his bed 90 days suffering constant pain and inability to sleep while up to the time of the trial which occurred nearly 14 months after the accident he had not been able to stand The reason of this result the physicians considered largely due to the tearing loose of the ligaments and to the displacing of the heel bone where it united with the bones of the foot, which had caused the axis of the foot and ankle to become perverted, the ankle to give way or turn out and the arch of the foot to be destroyed making a "flat foot which condition they pronounced permanent Under these circumstances, the man being 49 years of age and earning about $21 a week at a trade which required him to stand when he met with the accident, the Supreme Court of Missouri Division No 2, does not think a verdict in his favor for $5000 excessive

Malpractice Liability—Expert and X Ray Evidence — The physician sued in the malpractice case of Miller vs Dumon in which the Supreme Court of Washington has affirmed a judgment against him was called in to examine an injury which the other party had sustained in an accident ten or twelve days before which had been pronounced a fracture of the tibia of the left leg, by another physician who had been attending him As to what occurred during this visit further than that he told the party that there was no fracture of the bones of the leg but that he was suffering from a severe sprain there was a square contradiction in the evidence On the one hand it was contended that he undertook the treatment of the injury, while he, on the other hand denied it At any rate however, as a result of this visit, the physician first called was dismissed, the man got out of bed procured crutches under took to use the injured limb and while so doing the leg gave way in some manner causing him much pain and suffering, and compelling him to retake to his bed when he sent for the defendant, who for some reason, did not answer the call, and the physician previously employed was recalled, and the final result of the whole matter was a permanent injury to the leg Now, the court says that it may be that the weight of the professional testimony was to the effect that there had been no fracture of the bones of the injured limb but the evidence was contradictory and there was substantial testimony the other way sufficient of itself to support the verdict of the jury for the party suing in which case the verdict must stand Then the jury was instructed that in order for him to recover damages it must be satisfied by a preponderance of the evidence that his leg was in fact broken and that the defendant, acting as a physician and surgeon unskillfully and negligently treated the broken leg Besides, it was instructed that the fact that a physician responds to a call for his professional services does not necessarily constitute an employment, unless some act is done or advice given by the physician which indicates an intention on his part to enter upon the employment He may absolutely refuse this employment, if he sees fit But when any act is done, or advice given, that may reasonably be construed into indicating an active entering upon the employment then the liability of the physician attaches and he may be held responsible for his negligence or lack of skill These instructions, the court thinks, sufficiently covered the point that the physician sued contended that he had never undertaken to treat the injured limb by way of directing the jury's attention thereto The court further holds that a witness who has qualified as a physician and surgeon not only familiar with fractures but with the x ray process of determining whether a fracture has ever existed is an expert as much qualified to express his opinion from an examination made by means of an x ray negative taken by himself as are experts who make their examinations by means more commonly used by the medical profession The method of examination does not affect the competency of his testimony How much it affects its weight is entirely a question for the jury Nor does the court think the introduction in evidence of the negative itself objectionable it being shown to have been taken by an approved process and an approved apparatus and the witness having testified to its being a correct representation of the bones of the leg An x ray photograph it holds, is admissible as evidence when verified by proof that it is a true representation of an object which is the subject of inquiry

Current Medical Literature

Titles marked with an asterisk (*) are noted below

Medical Record (N Y), June 1

1 *The Diagnosis and Surgical Treatment of Prolapsed Kidney with Demonstration of a Simple Method of Examination for its Detection Augustin H Goelet
2 The Climate of Long Island Le Grand N Denslow
3 Superheated Air in the Therapeutics of Chronic Catarrhal Otitis Media George W Hopkins
4 Three Cesarean Sections—Recovery J P Baldwin
5 *Ether as an Anesthetic Edward Judson Wynkoop
6 A Few Observations from the Lorenz Orthopedic Clinic Leonard W Ely
7 A Case of Membranous Angina Due to Streptococci Followed by Paralysis of the Soft Palate Moses Keschner

Boston Medical and Surgical Journal, May 30

8 *The Diagnosis and Surgical Treatment of Renal Tuberculosis F Tilden Brown
9 Asthma F P Emerson
10 A Case of Trichinosis George G Sears

New York Medical Journal, June 1

11 *On Theories of Inheritance with Special Reference to the Inheritance of Acquired Conditions in Man J George Adami
12 Appendicitis Perforativa in Irreducible Right Scrotal Hernia with a Report of a Case O Thienhaus
13 *Muscular Action of the Arteries Andrew H Smith
14 Hyperacidity (Superacidity Hyperchlorhydria Superacidity Chlorhidria) A Clinical Study (Continued) H Illoway
15 A Case of Sarcoma in the Muscles of the Right Shoulder with Perforation into the Spinal Canal and Paraplegia Leonard Weber

Philadelphia Medical Journal, June 1

16 Two Successful Cases of Secondary Suture One of the Posterior Interosseous Nerve and One of the Median and Ulnar Nerves W W Keen
17 *Pancreatitis A W Mayo Robson
18 *The Examination of the Blood in Relation to Surgery of Scientific but often of no Practical Value and may Mislead the Surgeon John B Deaver

19 *Complicated Fractures Their Diagnosis and Treatment Thomas H Manley
20 *Pityriasis Versicolor with Special Reference to Allen's Iodin Test Jacob Sobel
21 *Biceps Tendon Jerk in Locomotor Ataxia Moses Lehrend

Medical News (N Y), June 1

22 *Some Factors Relating to the Etiology of Prostatic Enlargement J Bentley Squier
23 Gastric Ulcer and Muco Membranous Colitis at the Paris Congress James J Walsh
24 *Streptococcus Bronchitis in Influenza E Lorchheimer
25 *Fourth of July Tetanus H Gideon Wells
26 *The Use of Methylene Blue Injections in Pleurisy with Effusion Charles H Lewis
27 *The Appearance of the Soft Palate a Pathognomonic Symptom of Epidemic Influenza Louis Kolipinski

American Medicine (Philadelphia), June 1

28 *A Case of Antrum Infection and Sigmoid Sinus Thrombosis without present Middle Ear Disease Presenting the Symptoms of Facial Neuralgia and None of the Ordinary Symptoms of Disease in the Petrosa Retropharyngeal Gravity Abscess General Sinus Thrombosis without Much Impairment of Cerebration Death after Three Months Partial Autopsy, Presentation of Specimens Bayard Holmes
29 *Typhoid Fever and Pharyngeal Diphtheria Morris Manges
30 *Practical Thoughts on Pulmonary Tuberculosis Howard S Anders
31 *The Recognition of Tabes Dorsalis Theodore Diller
32 Simplicity in Therapeutics Edwin W Pyle
33 *The Radical Cure of Internal and External Piles by Excision John A Hawkins
34 Rigidity of the Spine (Spondylose Rhizomelique) Max H Bochroch
35 Some Notes on a Case of Cerebral Embolism Anna M Littlefield
36 Report of the General Hospital for the Treatment of Pulmonary Tuberculosis at Fort Bayard N M for the Period Ended December 31 1900 D M Appel

Cincinnati Lancet-Clinic June 1

37 Valedictory Address Miami Medical College E W Mitchell
38 House to House Operating Edmund C Brush
39 Phlyctenular Conjunctivitis S C Ayres
40 *Fistula and Consumption George J Monroe

Pediatrics (N Y), May 15

41 Scarlet Fever F D Millard
42 Two Cases of Congenital Dilatation of the Colon Theodore Fisher
43 The Intra and Extrauterine Periods of Stress as Pathologic Factors in Pediatry James G Kiernan

Virginia Medical Semi-Monthly April 26

44 Endocardiopathies Thomas F Satterthwaite
45 State Medicine James Evans
46 Intravenous Infusion of the Normal Salt Solution Valentine Taliaferro
47 The Significance of Running Ears D A Kurk
48 Faradic Anesthesia or Sedation and Galvanization Used Simultaneously Alexander Irvine

Merck's Archives (N Y) May

49 Glonoin Its Pharmacology Physiologic Action Toxicology and Therapeutic Uses H Edwin Lewis
50 Chats on Every day Therapeutics Solomon Solis Cohen
51 *The Use of Suprarenal Gland in Peritonsillar Abscess Lewis S Somers
52 Three Well Known Drugs (Quinin Iodin Sodium Sulphate) Harrey J Chadwick
53 Sodium Bromid in the Vomiting of Pregnancy J J Tribie

American Practitioner and News (Louisville Ky), April 15

54 True Greatness J Frank Crawford
55 Four Stab Wounds of the Abdomen H Horace Grant
56 Cystitis John P Wathen
57 Varicocele and its Radical Cure Harry C Weber
58 A Singular Case of Insect Bite T B Greenley

Northwestern Lancet (Minneapolis) May 15

59 The Present Status of the X ray in Medicine and Surgery J E Cross
60 Some Cases of Lithemia Mary Towers
61 Leucocythemia and Pernicious Anemia in North Dakota J E Engstad

Maryland Medical Journal (Baltimore) May

62 Pregnancy in a Double Uterus J M Allen
63 *Rabies and the Pasteur Preventive Treatment in Germany John Ruhrah
64 A Case of Tetanus Treated with Antitoxin J W Humrichouse
65 A Review of Some of the Recent Work on the Physiology and Pathology of the Blood Thomas R Brown

Interstate Medical Journal (St Louis, Mo), May

66 Clinical Lecture on Surgery William F Podman
67 Nephrectomy C F Ruth
68 The Eyes of Our School Children Eliot O Sisson
69 The Practical Application of the X ray in Fractures and Dislocations J Rudis Jicinsky

Medical Examiner and Practitioner (N Y), May

70 The Savings to Life Insurance Companies from Medical Discrimination at the Home Office Frank Sargent Grant
71 *The Urine in its Bearing on Life Assurance O J Kauffman
72 *Marriage in Relation to Life Insurance J M French
73 *Death Rate of the United States F L Cowgill
74 Latest Investigations on Uric Diathesis Otto S Binswanger
75 Benefit to Brain and Body from Bicycling in Moderation Frank S Grant

Indiana Medical Journal (Indianapolis), June

76 The Radical Cure for Chronic Suppurative Otitis Media J C Cline
77 Report and Histological Study of a Case of So called Pleurogenous Pneumonia W C White
78 Twins as Related to Obstetric Procedures Hugh A Cowing
79 Nerve Resection as Applied to the Supra orbital and Naso lachrymal Branches of the Fifth Pair J O Stillson
80 Pemphigus Vulgaris George R Green
81 Formaldehyde Poisoning James Wellborn

Quarterly Journal of Inebriety (Hartford, Conn), April

82 A Study of the Causes and Nature of Dipsomania P C Remondino
83 Management of the Victims of Drug Habits David Paulson
84 *The Actions of Morphin Upon Metabolism with Especial Reference to Internal Secretion and its Bearing upon Toxicology Edward T Peichert
85 Report on Heredity T D Crothers

Clinical Review (Chicago), June

86 Operation for Post menopausal Complete Prolapse of the Uterus Operation for Extensive Vesico vaginal Fistula J Clarence Webster
87 Abdominal Colopexy for Prolapse of the Rectum Fibroma of the Mesentery Excision of Twenty four Inches of the Intestine Use of the Button Paraplegia from Pott's Disease of the Spine John B Murphy
88 Goiter Complicated by Stenosis of the Trachea William F Morgan
89 Gastrostomy Umbilical Hernia Strangulated Scrotal Hernia Tendon Suturing Nephrectomy for Malignant Disease Renal Calculi Tetanus Cerebellar Tumor Laparotomy for Intestinal Perforation F Wyllys Andrews
90 Two Cases of Weak Heart George W Webster

International Medical Magazine (N Y), May

91 A Case of Chronic Cystitis with Surgical Kidney also Cystic and Prostatic Calculi Israel Cleaver
92 Hammonton N J as a Health Resort Charles Cunningham
93 Appendicitis and Diseases of the Uterine Adnexa Wilmer Krusen
94 Incontinence of Feces Samuel G Gant
95 The Management of Delayed Labor Due to Inertia Uteri John C Hirst
96 The Treatment of Abscesses Charles L Leonard

Medical Bulletin (Philadelphia), May

97 *Fangotherapy W C Hollopeter
98 *Clay Dressing in Skin Diseases J Frank Wallis
99 The Scope of the General Practitioner Jay G Roberts
100 Aristol in Gynic Hyperasthesia Ephraim Cutter
101 The Treatment of Epilepsy Charles W McIntyre

Medical Review of Reviews (N Y) April 25

102 The Indications for and Limitations of Spinal Cocainization in Surgery George Ryerson Fowler

Cleveland Medical Gazette, May

103 Bacteriology and Pathology of Diphtheria Roger G Perkins
104 The Differential Diagnosis of Diphtheria Edward P Carter
105 *Antitoxin in Diphtheria P H Sawyer
106 *Laryngeal Intubation in Diphtheria Joseph V Kofron
107 The Pulse Temperature and Respiration after Operation from an Analysis of 114 Consecutive Abdominal Sections without a Death Hunter Robb
108 Animate Bodies in the Auditory Canal J M Ingersoll

The Woman's Medical Journal (Toledo Ohio), April

109 Blood and Nerve Supply of the Uterus and Their Relation to Hemorrhage Rosannah Russell

Kingston Medical Quarterly, April

110 The Science and Art of Surgery Its Progress During the Nineteenth Century and its Prospects for the Twentieth R W Garrett
111 Prevention of the Spread of Infectious Disease by Isolation A Haig

112 Dr Horsey's Address at Medical Convocation
113 Valedictory Address—Medical Convocation M R Young

Iowa Medical Journal (Des Moines), May 15

114 Palpation of the Uterine Appendages George Gray Ward Jr
115 Reception Hospital for Cases of Acute Insanity Henry M Hurd
116 Relations of the Private to State Hospitals J H Kulp

Oklahoma Medical Journal (Guthrie), April

117 Theories and Facts Concerning the Perception of Renal Impressions John Ransom Hamill
118 Brief Notes from Medical Practice C Hill

Albany Medical Annals, May

119 *The Diagnosis of Cancer of the Stomach Andrew MacFarlane
120 *Surgical Intervention in Carcinoma of the Stomach Willis G MacDonald
121 *Report on the Gastric Secretion in Twelve Cases of Pulmonary Tuberculosis Five of which Gave No Evidences of Tuberculosis when First Seen Leo H Neuman

Dominion Medical Monthly (Toronto), May

122 Malignant Disease Affecting the Fundus of the Uterus James F W Ross
123 Examinations for Life Assurance W H Pepler
124 Suggestive Therapeutics J M Jory
125 Cases in Skin Diseases Graham Chambers

Medical Times (Philadelphia), May

126 Bimanual Palpation of the Pelvic Organs W Oakley Herrance
127 Creosote in Pneumonia—A Resume J L Van Zandt

American Journal of the Medical Sciences (Philadelphia), June

128 *Cancer Distribution and Statistics in Buffalo for the Period 1880 1899, with Special Reference to the Parasitic Theory Irving Phillips Lyon
129 Chronic Myocarditis and Fatty Degeneration of the Heart Beverley Robinson
130 *Osseous Cyst of the Fibula Carl Beck
131 A Clinical and Histological Study of a Case of Circumcorneal Hypertrophy of the Conjunctiva Charles A Oliver
132 *Nitrous Oxid and Oxygen as a Surgical Anesthetic S Osmond Goldan
133 *Croupous Pneumonia George Wm Norris
134 *Heart and Circulation in the Feeble minded John Madison Taylor and J Savary Pearce

Pacific Medical Journal (San Francisco), May

135 Upon the Treatment of Prostatic Hypertrophy M Krotoszyner
136 Diseases of the Stomach and Their Dietetic Treatment Alfred W Perry
137 Vaccinal Eruptions Francis P Williams
138 Chloroform Anesthesia A I Werner

Atlanta Journal-Record of Medicine, May

139 A Contribution to the Study of Deafness Ross P Cox
140 The Treatment of External Cancer with Caustic Potash M B Hutchins
141 Infant feeding Samuel A Visanska
142 Subphrenic Abscess in its Relations to Some Complications J McF Gaston, Jr

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AMERICAN

1 **Prolapsed Kidney**—Goelet holds that this condition is more frequent than usually supposed not always giving rise to symptoms directly referable to the kidney It is often not discovered because by the usual methods of examination only an expert can detect it unless the kidney is much enlarged or the subject is thin Palliative measures are of no avail, and therefore useless and unwise Lumbar fixation is the correct method of treatment if there is no contra indication, the operating being simple and free from risk, and successful when properly executed with due attention to the patient's condition prior to operation, and during convalescence for a period of several months The object of his present paper is to call attention to certain special symptoms and the method of examination which he has adopted Pain referable to the kidney region is very infrequent The symptoms are usually what may be termed reflex The method of examination which he has found best is as follows The clothing is loosened about the waist, the corsets are removed, and the undergarments that are suspended from the shoulders are rolled up under the breast, exposing the ribs below the level of the ensiform cartilage, while the skirts are drawn down below the level of the crest of the ilium The patient is directed to hold up the upper garments with the right hand and to support the skirts with the left to keep them from dropping off This gets her hands out of the way She is then placed with her back to the edge of a table for a brace or against the wall or a door but she must not be permitted to lean back against it The legs must be perpendicular to the surface upon which she stands She is now directed to incline her body slightly forward by flexing it upon the pelvis If the abdomen is unduly rigid and is not sufficiently relaxed by this position, additional relaxation may sometimes be secured by directing the patient to bend the right knee and rest the toe of that foot only on the floor throwing the weight mainly upon the left foot The examiner sits in front of her a little to the right He grasps the right loin with his left hand with the four fingers behind the right lumbar region and the thumb in front just below the border of the ribs, and when this is done the patient is directed to take several deep inspirations and to expire to the extreme limit When expiration is complete he presses the thumb well into the abdominal wall under the ribs depressing it as much as possible so as to reduce the space between it and the fingers posteriorly If the kidney is out of position it must be below his thumb, and he can feel the kidney slip under his thumb if it is pushed up into position With the left hand flat against the abdomen the examining physician then draws the relaxed abdominal wall downward and depresses it by pushing with the fingers inward, then upward If he succeeds in getting the fingers under the kidney, it will be pushed up against and then under the thumb by this manipulation It will require some little practice to maintain the necessary depression by the thumb while attention is diverted to the manipulation of the other hand Sometimes it will be possible to engage the kidney between the tips of the fingers below and the thumb above before it is pushed up into place and by manipulation outline it distinctly This is possible however only when the abdominal wall is thin or relaxed When the abdominal wall is thick or cannot be made to relax in the standing position the patient is made to recline on the back with right leg flexed and the examination made in the same manner in this posture The patient is ordered to take several deep inspirations and to expire to the limit and at this moment the thumb is pressed well up under the border of the ribs If this does not dislodge the kidney, she is directed to cough several times The article concludes with the technique of the operation for floating kidney

5 **Ether**—Wynkoop concludes that ether is the safest of anesthetics but that more care is necessary in the primary examination and in regard to position and condition of patient during narcosis A good inhaler, the simpler the better, is needed with fresh ether made by a reliable firm, small, quarter pound cans are better than larger ones The ether should be added in small quantities, beginning the narcosis with the inhaler a short distance from the patient's face and gradually bringing it down A more detailed study of this subject should be given in our medical schools and in all operations a trained anesthetist is required

8 **Renal Tuberculosis**—The recognition of renal tuberculosis is apt to be tardy though the trouble is not uncommon Brown insists on the importance of a routine search for tubercle bacilli in the urine and calls attention to possible errors in diagnosis from smegma bacilli To avoid this, if the urine is collected from the bladder by a catheter the then demonstrating the absence of these bacilli will correct the mistake The subjective symptoms are sometimes pronounced and often absent A dull aching pain in the lumbar region is significant, as also is the more acute kind of pain referable to the kidney or ureter In many cases symptoms resembling mild malaria occur and he looks upon them as not infrequent precursors of the later localized ones The frequency of urination does not usually appear until the lower segment of the ureter has been involved with an irritable state about its mouth The principal objective symptoms are large and tender kidney as well as all grades of pyuria and hematuria, besides a jut

appreciable or very marked diurnal temperature variation, loss of color or weight tuberculin reaction, and finally the presence of tubercle bacilli He attributes much importance to tuberculin reaction and advises the employment of tube cultures in all cases of ureteral catheterization to demonstrate the presence of other pathogenic micro organisms Nephrectomy for tuberculosis has been comparatively successful but few deaths having been reported In his experience persistent and exhausting vomiting has caused more deaths than any threatening anuria If the disease is seen to extend down the ureter to a point below the first sacral vertebra he is not yet ready to advise total extirpation since a considerable amount of tubercular ureter left in a functionless state may recover under subsequent treatment If it were certain that the ureter was diseased from kidney to bladder it might improve the patients chances to have a primary ureterectomy of the lower half while the proximal end of the tube was given a cutaneous implantation to drain the kidney until an early favorable time for nephrectomy Often in cases presenting tubercular vesical lesions where only one kidney is involved, nephrectomy he thinks is indicated as offering the best chances for extension of life and comfort A number of histories of cases are reported illustrating the different points made in this paper He concludes with the remarks that too great pains can not be taken by the physician and surgeon to demonstrate the location and extent of the disease before administering the treatment The integrity of the other kidney, of course has a great bearing on the surgical aspect of any case In the ward hospital cases immediate operation appears to be the only alternative but for those who can afford climatic changes and rest a careful preliminary observation of the existing condition of the urinary tracts should precede their travels and be repeated in order to keep posted regarding the advancement of the disease

11 **Inheritance** —Adams article is lengthy and too detailed to be abstracted in full He suggests a sort of side chain theory of heredity similar in some respects to the Ehrlich theory of immunity and applies this to inheritance and atavism and the inheritance of acquired characters He takes issue with Weissmann maintaining that in certain ways acquired characters are inherited The article must be carefully read to be properly appreciated

13 **Muscular Action of the Arteries** —Smith remarks on the muscular action of the arterial coats and its importance to the circulation in general also the effects of calcification or sclerosis He notices Dr Daland s recent paper on arterial spasm which he says throws a powerful light on the action of certain poisonous or at least irritant substances retained in the blood under conditions of renal insufficiency What capsicum did in a high degree and for a brief period in Dr Daland s case is done in a minor degree by excrementitious substances constantly remaining in the circulation

17 —See abstract in THE JOURNAL of May 25 p 1490

18 —Ibid

19 **Complicated Fractures** —The methods of examination of fractures are first given by Manley who insists on completeness of detail inspection posture manipulation, narcotic relaxation of muscles and lastly consultation with more skilled practitioners in this particular line He summarizes the principles of treatment in 1 Placing the limb in a comfortable position 2 Securing an unhampered circulation 3 Reduction of fragments and support He criticises the time honored rule of immediately reducing fragments and immobilizing them and shows how this is impracticable in many fractures, and needless in some It has been his practice to dispense with splints where marked displacements do not exist and with the best results With multiple fractures and general crushing injuries he would bolster up the fractured limb relax the flexor muscles leach bathe and swathe the parts await the subsidence of inflammation of plastic union of fragments and then splint not so much to splice the fragments as to hold the joint and support the enfeebled parts The open incision recommended by some he thinks is full of peril on account of the enfeebled circulation though it would seem an ideal means in certain fractures of the femur with overriding of the fragments for example The ambulant treatment of which we hear so much is not practicable in the great majority of lower limb fractures, where pressure and rest in bed are indispensable after shock With the patient under close observation with the aid of antiseptics anesthetics and aseptic precautions we first endeavor to preserve the limb in the best shape we can He advises practitioners to treat fractures at home not send them to hospitals, and if they feel incompetent to take a post graduate course or several of them, where there are ample facilities for instructions in this particular line

20 **Pityriasis Versicolor** —From his experience Sobel concludes that 1 The old theory that only hidden parts are affected is no longer tenable 2 Allen s iodin test is of marked value not only for class room demonstration and for bringing into relief pale and hidden lesions of pityriasis versicolor but also for differentiating parasitic or presumably parasitic skin affections from those of a non parasitic nature 3 Recurrences are in the main due to the overlooking and non treatment of the supra pubic region and to the use of desquamative agents to the exclusion of penetrating ones Both must be combined if a cure is desired 4 Phthisical subjects, while affected in great measure on account of the hypersecretion of sweat, do not form the greater part of these patients It occurs in all degrees of health and disease, a marked hyperidrosis, however predisposing towards it 5 Children and the very old are occasionally though rarely attacked 6 It may occur in all shades from a very light pink to almost coal black (pityriasis nigra) the color being influenced by the condition of cleanliness the circulation of the skin the occupation of the patient and the color of the underclothing

21 **Biceps Jerk in Tabes** —From a number of observations, some of which are reported Behrend concludes that ataxia in the arms is as a rule more marked when biceps tendon jerk is absent and usually coincident with that of the legs In the presence of biceps tendon jerk with slight ataxia of the arms ataxia of the legs is invariably well marked Sensation is usually normal in cases with normal biceps tendon jerk and defective when it is absent That arthropathies are present only in the marked ataxic The loss of sense of position is almost constant in advanced tabes and the loss of weight sense is infrequent The shooting pains in the arms do not bear any relation to the degree of ataxia The intensity of the symptoms is not dependent upon the duration of the case but rather upon the extent of the sclerotic process Where biceps tendon jerk is absent, the sclerosis probably extended to the cervical region, but we must remember that this reflex may be absent in normal individuals

22 **Prostatic Hypertrophy** —Squier calls attention to the causes of prostatic hypertrophy which he thinks are largely comprised in abnormal sexual practices partly due to deficient information on the subject

24 **Streptococcus Bronchitis** —This name is given by Forchheimer to a form of bronchitis following influenza in which the streptococcus seemed to be the prominent and often the only microbic attendant It usually follows the respiratory type of influenza though any form may precede it, and symptoms of influenza disappear when the bronchial trouble appears It usually begins rather suddenly with spasmodic cough often simulating whooping cough, occurring at night and in the day time with sputum varying from merely serous to mucous and purulent The larynx is seldom implicated, but it involves the medium sized bronchi The temperature is abnormal, ranging from 96 F in the morning to 99 to 100 or more in the evening, thus having an abnormally great diurnal range The pulse may be often slow, though it sometimes is rapid In the rudimentary type of the disease is the shortest course and the temperature is not typical for any length of time The cough is not thoroughly developed and expectoration is limited The excessive form takes the type of septicemia with intermittent fever sweats and occasional slight chilliness Two cases are reported of septic pyemia originating in this condition In patients where the cardiac condition

was such that heart weakness could be easily produced it developed unless special care was taken In the protracted cases the chief difficulty in differentiation will be from tuberculosis, and he thinks the rule has been given too rashly that subnormal temperature with evening increase is characteristic of tuberculosis In the majority of cases there will be little difficulty If there are general bronchial symptoms and no tuberculosis bacilli but some other form of the streptococcal type this condition can be diagnosed He thinks for this condition the benzoate of soda in large doses, 1 dram every two to four hours always every two hours in the beginning, is advisable For the annoying cough, sedatives and for excessive expectoration atropin or belladonna are of advantage In the severer forms unguentum Credé has been very serviceable, and combined with antistreptococcic serum injections in special cases has given him good results In all cases we must bear in mind that we are dealing first with a local infection, secondly with a general one the concept of a septicemia, acute or chronic must guide us in the therapy employed

25 **Fourth of July Tetanus** —Wells article is summarized as follows Tetanus is endemic in Chicago the specific organism being present in the dirt of the streets Every Fourth of July an epidemic occurs because these bacilli are carried deeply into wounds before wads from blank cartridges and are then under favorable conditions for multiplication Epidemics which always occur in other portions of the country at the same time are presumably due to the same causes Most of the cases occur in wounds that have been improperly cared for the wads not having been removed or suitable drainage instituted Therefore the first indication is to secure thorough surgical cleansing and drainage of the wound preferably and almost necessarily under an anesthetic As however tetanus sometimes occurs even in well drained wounds and considering the frequency with which it follows blank cartridge wounds it seems to the writer that such cases should receive a prophylactic dose of say 5 cc of tetanus antitoxin as soon as possible after the wound is first seen It seems certain that if antitoxin prophylaxis were adopted there would be no further Fourth of July epidemics and this end justifies the means

26 **Methylene Blue Injections in Pleurisy with Effusion** —Lewis has used methylene blue employing the serum itself as a solvent after making a solution of it with the blue returning it into the cavity The technique of his operation is described His process is by using the aseptic syringe and introducing the drug after examination of the serum without withdrawing it It does away with sterilizing the syringe and otherwise preserves it for the action of the blue is rather destructive to valves He has employed this method in twenty four cases of pleural effusion including suppurative case The average duration of treatment of the twenty three serofibrinous cases were a little under fourteen days The quantity of methylene blue employed was from 5 to 15 grains

27 **Influenza** —The new symptom described by Kolipinski consists in the appearance on the mucous membrane of the soft palate of small convex projections of a pearly whiteness or transparency Their size is that of a grain of sand They may be few or numerous and are best displayed on the base of the uvula, median raphe the lateral borders of the same, the anterior surface of the palato glossal fold, about the outer border of the tonsil A spatula rubbed over them gives a hard, rough sensation Full illumination is necessary and direct or diffused sunlight is best There are no subjective sensations connected with them

28 —See abstract in THE JOURNAL of April 20, p 1136

29 **Diphtheria and Typhoid** —Five cases are reported by Manges, showing that the Klebs Loeffler diphtheria bacillus occurs sometimes in typhoid fever, and he maintains that this is not at all rare or absent as has been asserted by Curschmann He also calls attention to certain peculiar ulcerations of the pharynx in typhoid that were first noticed by Bouveret and have been recently studied by Schaefer They are situated in the anterior pillars of the fauces are oval in shape, averaging from 6 to 12 mm in length and 4 to 12 in width, the long axis parallel to the long axis of the tonsil often surrounded by a small hyperemic halo Their base is grayish yellow or grayish red usually smooth, but sometimes granular There is no false membrane or marked glandular enlargement As a rule they are single, but several small ones may coalesce into one large one The average duration of these, according to Schaefer is about twelve days In the case he reports here, there was an atypical whitish patch and Klebs Loeffler bacillus was present on one day, the ulcers lasted over three weeks He considers it a Bouveret ulcer with diphtheria infection

30 **Pulmonary Tuberculosis** —The points specially urged by Anders are the home treatment of tuberculosis, fresh air and sunlight, and he advises patients when possible, to be quite nude exposed to the sun s rays for one half to two hours at a time The prejudice against night air should be done away with and respiratory exercises are recommended He suggests as a relief to cough when it is aggravated by the recumbent position that the patient should assume this for short periods during the day practicing the deep breathing exercises This trains the lungs to be less irritable at night Two drugs are mentioned as having been of special use to him, though seldom referred to They are aromatic oils the oils of sandalwood and eriger on The first in 10 drop doses on sugar every three or four hours seems to very much relieve the cough The latter in 5 minim capsules every two, three or four hours has been of decided benefit in the hemoptysis of tuberculosis Chest strapping has been useful in several cases where the coughing has excited dry pleuritis and he has found olive oil useful as a substitute for cod liver oil He concludes with a plea for the registration of tuberculosis

31 **Tabes Dorsalis** —The symptoms of tabes are discussed and the following ones named as cardinal by Diller 1 Failure of knee jerks 2 Romberg symptom 3 Argyll Robertson pupil 4 Lightning pains 5 Depression of the function of the bladder and genitals With any three of these symptoms he believes the diagnosis may be made with certainty and probably with any two of them when evidence pointing to multiple neuritis paralytic dementia or cerebrospinal syphilis is absent The more important secondary symptoms or signs are 1 paraesthesia anesthesia or analgesia of the legs, 2 locomotor ataxia 3 transient ocular palsies, 4 ulnar paresthesia 5 optic atrophy Two of the cardinal signs and one of the secondary are sufficient for absolute diagnosis and two of the secondary and one of the primary make tabes most probable

33 **Hemorrhoids** —The method recommended by Hawkins is the use of the clamp or hemostatic forceps, tightened and the entire mass cut off close He then follows up with suture and sews up the stump when the clamp is released He says this operation is less objectionable than the ligature or clamp and cautery methods He has done this in his office and allowed the patient to return immediately home There is no danger from hemorrhage very little pain quick recovery and an absolute cure The ordinary preparatory and after treatment is employed

40 **Tuberculous Fistula** —Monroe describes the different symptoms of tubercular from other fistulas They are a general run down condition in the tubercular variety with a cough, and he finds as a rule the anus surrounded with long, silky hair which always leads him to suspect tuberculosis The anus also appears to be depressed and drawn inward In tubercular fistula the external opening is large and ragged differing in this from the ordinary type The pain is slight as compared with the ordinary fistula The discharge as a rule is profuse, but much thinner and watery He advises operation in tubercular fistula, it is easy on account of the lack of pain but if an anesthetic is used, chloroform is advisable as not irritating the air passages There is usually little hemorrhage In place of curetting he is in the habit of using carbolic acid 1 to 4 of water, swabbed over the ulcer and cut surfaces, and then he packs lightly with borated gauze The usual treatment of fresh air sunlight, etc is

advisable in the after management of these cases and out door life is to be recommended to patients of this class

51 **Suprarenal Gland and Peritonsillar Abscess**—Somers recommends the use of suprarenal gland in 5 grain tablets, freely chewed and held as far back in the pharynx as possible as a remedy for embarrassment of respiration etc, in peritonsillar abscess He prefers this method to a spray and reports cases When the pus is superficial it may discharge itself under this treatment but when it is deep operation of course will be required In this case however the use of the drug is good, as it reduces the excessive swelling and enables the surgeon to get at the spot more safely and easily

63 **Rabies in Germany**—The results of the Pasteur preventive treatment in Germany are reviewed by Ruhrah and he finds that in Prussia while there is a definite increase in the disease in animals with consequent increase in the number of people bitten the mortality percentage has been distinctly lowered by the Pasteur method In the untreated cases during 1899 the deaths amounted to 6 9 per cent while in the treated cases even including two doubtful ones, it was only 0 52 of 1 per cent

71 **Urine in Life Assurance**—Kauffman sums up as regards albuminuria that Bright's disease nearly always is accompanied with albuminuria but that we should not always hold that albuminuria means Bright's disease The examination for renal casts is most important and should never be omitted unless other evidences of Bright's disease are absent The so called physiologic albuminurias are not to be lightly recommended for acceptance As regards the finding of sugar in the urine no case of glycosuria can be unhesitatingly recommended Only in instances where it is due to known and temporary causes such as when from laughing gas or some exceptional dietary error should it be passed over

72 **Marriage and Life Insurance**—While marriage in both sexes tends to longevity insurance companies are inclined not to take female risks largely on account of the special perils of child birth and also the moral risk They claim that it is not the proper order of things for a married woman to provide benefits and insurance for others She should be the recipient French suggests these points and gives the practice of several insurance companies in regard to this question The line is not drawn at marriage per se but at some of the conditions which accompany it Only one of the distinctions has any reference to longevity and that relates to the child bearing period All the others deal mainly with the moral hazard and are applicable only to women

73 **Death Rate of the United States**—Cowgill's statistics show that the actuary records show the death rate per 1000 of the population is lowest in the Northwestern states including all of those states north of California and Colorado and east of Iowa and Minnesota In the Northeastern division which includes the New England states New York and New Jersey the death rate is highest being 20 per 1000 as compared with 8 26 for the former division The next lowest to the Northwestern division is the North Central which includes Illinois Indiana Iowa Michigan Minnesota Missouri Ohio Pennsylvania and Wisconsin being 12 58 per 1000 In the Southeastern division including the South Atlantic states it is next highest being 13 20 while the South Central which includes the Gulf states with Kentucky and Arkansas, it is 13 17 in the Southwestern division including Colorado and Utah as well as California Nevada and New Mexico it is 12 70 These differences indicate to him the impracticability of having one standard mortality table for the whole country where the localities and conditions so widely differ

84 **Morphin**—Our knowledge of the physiologic properties of morphin is fragmentary and unsatisfactory and the importance of the subject has led Peichert to experiment on a number of dogs to study not only the general metabolism but the bearings upon toxicology The calorimetric method was chosen It is based on the fact that heat produced in any structure is proportionate to the degree of metabolic activity of that structure therefore the heat produced by the entire organism during any given period is an index of the mean degree of the activity of metabolism in all the tissues However as each structure is largely independent in its chemical processes this index can be applied as a standard to any organ only in conjunction with what special evidences exist regarding metabolism in that organ Twelve experiments were performed In each the heat processes were studied before giving the morphin and after The results were decided and quite uniform and heat production was decreased in every experiment but its effects were decidedly more marked, as a rule during the first two hours after morphin The average decrease in the ten experiments in which the dose was 01 gram per kilo was 59 2 per cent Heat dissipation was also decreased in every experiment and the average for the same experiments was 41 7 per cent The amount of depression of heat production was about 20 per cent greater than that of heat dissipation The cause of the decrease of heat dissipation is chiefly due to compensating action of the thermolytic mechanism to conserve the body heat and to a direct depression of the circulation The cause of the decrease of heat produced is theoretical, and the author concludes that the profound depression produced in the metabolism is not thoroughly shared by the metabolic processes concerned in internal secretion The most important indication in morphin poisoning is not merely to administer specific excitants to the respiratory center but to reach the cause of the depression and direct some measure to the processes concerned in internal secretion and repair It is probable that most agents proven of value are so because of their action on these processes though this has been hitherto unrecognized Atropin he claims can not be held a reliable respiratory stimulant in morphin poisoning There is very little evidence that it is to any marked degree a metabolic excitant It is probable that it is almost a universal depressant and its reputed value in opium poisoning is due largely to circulatory and cerebral excitation coupled at times with a more or less important increase of the rate or depth or both of the respiratory movement Caffein besides its value as a direct respiratory cardiac and psychic stimulant is probably of indirect value by affecting internal secretion through the nervous muscular and secretory structures It increases body temperature by increasing heat production and in some obscure way affects general nutrition, lessening the quantity of urea formed facilitating assimilation furthering chemical processes in the muscles Strychnin did not particularly seem a valuable antidote but aside from its direct action on the respiratory center it may be of value because of its tonic powers on trophic and allied centers That it affects internal secretion is shown by stimulation of the salivary glands and increase of heat production and effect on the nutritive processes generally Cocain is one of the most powerful respiratory stimulants and very general and potent metabolic stimulant The other agencies mentioned are faradization cold douches prolonged hot baths etc

97—See abstract in THE JOURNAL of April 13 p 1062

98 **Clay Dressings**—Wallis has for six years employed wet clay as a dressing in skin diseases It has the mechanical property of holding water thereby assisting osmosis and he attributes to it also certain therapeutic effects from the mineral salts contained It is preferable to sterilize it by baking in the oven for several hours before using He applies it in the form of paste under several layers of gauze which must be kept constantly wet by covering with a wet towel several times a day Clay dressing should be removed every forty eight hours The most forms of inflammatory skin diseases do well under this treatment he notices especially the rapidity of healing in ulceration It admits of many forms of modification and medication and he suggests the use of bichlorid of mercury phenol boric acid the soluble alkalies and glycerin

105 **Diphtheria Antitoxin**—Sawyer has had within two years eight cases of laryngeal diphtheria all treated with antitoxin three were in extremis and were intubated and he thinks that if the one which died had been intubated he too, would have lived The nose and pharynx were also seriously involved Five recovered without sequelæ two in whom the

administration was delayed had some streptococcal poisoning, one had a certain amount of paralysis, and the other suffered with bronchitis and extreme cardiac weakness He believes the value of antitoxin lies in the immediate arrest of formation of membrane the healthy condition in which it leaves the mucosa rapid convalescence and the absence of sequelæ The largest dose he used was 5000 minims in a little girl 4 years old In the other cases from 1000 to 3000 units were used

106 **Intubation in Diphtheria** —Kofron believes that one is justified in intubating when there is dyspnea with dry, stridulous embarrassing suffocating cough, or when the cough becomes suppressed also when dyspnea is not relieved by previously administered antitoxin and whenever it is increasing in intensity when the dyspnea is accompanied by an irregular rapid easily compressible pulse or when the pulse becomes imperceptible when restlessness is increasing even if dyspnea is not alarming, if spasmodic attacks of dyspnea occur, and if cyanosis occurs If we have a combination of these symptoms the operation becomes imperative and no delay should be tolerated He notices some of the opinions in regard to the comparative value of tracheotomy and maintains that intubation has a great advantage over the latter in that there are usually few objections on the part of the parents to intubation while there would be many to tracheotomy

119 **Gastric Cancer** —The methods of diagnosis of gastric cancer are noticed by MacFarlane The general constitutional symptoms are not at all pathognomonic of malignant disease of the stomach, but are characteristic of cancerous growths anywhere The local vary with the extent of the disease and the mechanical depend upon the position of the disease in the stomach The loss of appetite and the absence of hydrochloric acid indicate catarrhal conditions of the stomach due to the growth and its toxins but where the cancer is developed on the basis of an ulcer and is limited hydrochloric acid is not usually absent Lactic acid exists in the absence of free HCl and characteristic coffee ground hemorrhage is diagnostic The mechanical signs are the result of obstruction at the pylorus or cardia The tumor when it exists of course is important and its motility is diagnostic Pain is rarely absent Three symptoms are of special significance the absence of hydrochloric acid presence of lactic acid and the occurrence of motor disturbances The question arises, how can the general practitioner who sees the case at its very inception make a probable diagnosis of malignancy? He could easily determine disturbance of nutrition by finding food two hours after an Ewald test breakfast or six hours after a Riegel test meal If the patient states that he has vomited food taken the day before the passage of the stomach tube is not even necessary This does not prove of course that the patient has cancer, but it does prove that one has to do with no simple indigestion or dyspepsia and that the case should be given a thorough examination

120 **Gastric Cancer** —The surgery of gastric cancer is considered by MacDonald, who thinks there is little justification for total extirpation and that the old rule of cutting one centimeter beyond all evidence of infiltration is not enough, that three centimeters should be the limit and in the duodenum at least two centimeters from the most dependent portion of the growth He uses and illustrates here the more recently devised clamps of Kocher and points out their advantages For two years he has employed the von Hacker method of attaching the jejunum to the posterior gastric wall with retrograde anastomosis between the duodenum and the jejunum the results have been satisfactory During the past year he employed it 8 times with 7 recoveries He used the suture mostly for the gastric jejunal anastomosis and for the secondary one the Murphy button While the technique of the method is rather complicated he thinks the whole operation can be done in forty minutes including the closure of the abdomen Its advantages are freedom from contamination of the wound by the stomach contents accessibility of the neighboring lymphatic nodes no subsequent danger from suture perforation freedom from hemorrhage and saving of time There is no embarrassment from the amount of tissue removed, as no effort is made to bring the duodenum and the remainder of the stomach in apposition

121 **Gastric Secretion and Tuberculosis** —Twelve cases are reported by Neuman pointing out the gastric disturbance which precedes the onset of tuberculosis In five of the case there were neither physical nor subjective symptoms of tuberculosis when first seen

128 **Cancer Distribution and Statistics** —Lyon's article is an analysis of the statistics of cancer from the original board of health data of the City of Buffalo for a period of twenty years, 1880 to 1899 inclusive The results are tabulated and discussed at length and the principal facts and results summarized in substance as follows 1 The mass distribution of cancer on the map shows a particular concentration in the German wards No other relation than that of race can be demonstrated to exist between this area of concentration and local conditions 2 That there is a real relation between this local concentration and race is further indicated by the race table which shows that cancer is many times more frequent among the foreign born, and particularly the Germans, than the native born This latter fact is also in record with the census statistics for twenty eight large cities The cancer rate of foreigners in general in Buffalo was 4 59 times the rate of the native born, and the corresponding rate of Germans and Poles was still higher, 4 81 3 The Germans and Poles are further distinguished by the high rate, 43 8 per cent of involvement of the stomach, or 2 8 times the rate shown by the native born Cancer of the stomach, therefore, was ten times more frequent in Germans and Poles than in the native born in Buffalo for equal numbers of each These figures seem hard to explain on the embryonic theory, and tend to support the parasitic theory by assuming that the peculiar diet of the Germans is more liable to be contaminated with cancer parasites than the ordinary diet of other classes Cancer of the uterus and breast in Germans and Poles is correspondingly low being hardly one half as frequent as in the native born This seems to be a further argument for the parasitic as opposed to the embryonic theory, since the birth rate and habit of nursing their children is greater amongst the Germans than Americans 4 The ratio of males to females the latter taken as 100, was 93 for the German and Poles and from 51 to 61 for all foreigners except Germans and Poles The high German male rate is probably directly dependent on the frequency of gastric cancer and the infrequency of mammary and uterine cancer in the Germans For all classes the ratio of males to females was found to have increased during the twenty years covered by the investigation This rise was very slight for the native born 5 An increase in general cancer rate from 32 to 53 per 100,000 of the population (65 per cent) took place from 1880 to 1899 A similar increase has been shown in other countries, and is partly real not entirely apparent The rate of increase is shown to depend on changes in the proportion of foreign born because the cancer rate is so much higher than in the native born

130 **Tibial Cysts** —The importance of diagnosis between benign cysts of the long bones and sarcoma is emphasized by Beck, but it is not very difficult to confuse the two diseases Both are alike in their slow and painless onset, often following trauma and gradual bulging of the area and their preference for youthful age The fact that the contents of cysts are different from sarcoma would show that an exploratory incision would clear the question but he has found the *Roentgen* rays decidedly useful in this diagnosis In osteosarcoma the outline of the bones appears more or less abnormal or indifferent some areas seeming translucent, while in osseous cysts the cortex appears thin and narrow, but well marked and regular The fluid center of the bone is entirely translucent adjacent epiphyses are normal This regularity of the texture of the walls of the cavity in skiagraphs seems to be the characteristic skiagraphic feature of the osseous cyst in contradistinction to the irregular texture of the osseous sarcoma The vicinity

of the epiphyses is also in favor of cysts for histologic reasons He reports two cases

132 **Nitrous Oxid and Oxygen Anesthesia**—The advantage of combined nitrous oxid and oxygen anesthesia are described by Goldan who illustrates the apparatus and calls attention to points which he has noticed in administration "1 The apparatus must be in perfect working order and always tested by the administrator himself 2 A sufficient supply of both gases at hand 3 Atmospheric air must be rigidly excluded In patients with beards the nostrils may be closed, the mouth tube may be used instead of the face piece or the beard thoroughly moistened with water 4 The patient should be prepared as for any surgical anesthetic 5 The gas bags should never be fully inflated, but between one half and two thirds full In this way the pressure of the gases is kept more nearly equal 6 Oxygen should not be turned on immediately the administration begins, but sufficient nitrous oxid inhaled to replace the oxygen existing in the blood, three to six breaths will be sufficient. Oxygen should be admitted gradually and in quantity determined entirely by the patient's condition, remembering cyanosis calls for more oxygen, evidences of excitement and returning consciousness meaning that less oxygen is required In using the gases in long narcosis the taps of especially the nitrous oxid cylinders are apt to freeze, owing to the transition of the gas from the liquid to the gaseous state, the cylinders becoming covered with frost, to avoid this a towel wrung out of boiling water should be placed about the tap but not about the cylinder itself The patient should always be placed upon the operating table in the position in which the operation is to be performed, any position may be employed, providing it will not interfere with the anesthesia The preferable postures in my experience, have been the dorsal and Sims ' The sensations from this kind of anesthesia are much the same as with gas alone, but the oppressive ones are usually absent There is more or less sensory anesthesia while consciousness still lasts Insensitive conjunctiva and snoring respiration are signs of anesthesia in dental cases The snoring should be permitted from three to five minutes before removing the mask, which gives a longer period for operation The cyanosed condition seen in using gas alone is never observed with this Consciousness returns immediately The shock from this method is less than from ether and chloroform and after symptoms are not especially troublesome Headache may occur, and also nausea and vomiting, but rarely persistent The method is more expensive than the others which may be to some a disadvantage

133 **Croupous Pneumonia**—This article is a clinical study of 500 cases from the recent records of the Pennsylvania Hospital Norris analysis indicates a large increase in the admission of cases of pneumonia in the last two years, over two thirds of the cases occurring in the last one half of the period Out of 500 cases, 125 or 25 per cent died 7 became phthisical The mortality was highest among the Germans and lowest among the Russians, though the numbers are comparatively small He attributes the lessened mortality among the Russian Jews to temperate habits in regard to alcohol Of the cases known to have occurred in drunkards the mortality was 67 per cent The greatest number of cases occurred in the earlier decades of life and among teamsters and others employed in outdoor occupation The lower lobes were the most frequent seat of the lesion and the highest mortality was when both lower lobes were alike affected The apical pneumonia occurred most frequently in the young In the complicated cases the mortality was about 40 per cent. in uncomplicated cases only about 10 per cent The study illustrates the fact that the highly febrile cases are less dangerous than the slightly febrile ones the former being an index of vital force The greatest frequency of the disease was in the spring months which agrees with other statistics A chill occurred at the beginning in just one half of the cases 301 cases ended by crisis, 74 by lysis Pseudocrisis was observed in 54 cases at varying periods from the 7th to 21st days Previous attacks were known to have occurred in 57 cases Both albumin and casts were present in nearly one half of the cases In fatal cases they were absent in a very small proportion The complications were various, jaundice, typhoid fever, delirium tremens, and pleural effusion being the most important The mortality was highest with jaundice and delirium tremens Inequality of the pupils was found in only a very small proportion of cases and would seem to be rare It is not infrequent in healthy persons Norris does not seem to consider Sighicelli's observation as regards this point as being very much confirmed Relapses occurred in only three cases The treatment was expectant and symptomatic, a specific treatment has not yet been discovered

134 **Heart and Circulation in the Feeble Minded**—In the study of the circulation of 72 cases of feeble minded in the Pennsylvania school at Llwyn, Taylor and Pearce found a great number of varied cardiovascular signs altogether out of proportion to mental defect, so much so as to warrant assuming vascular heart disease to be an important etiologic factor in continuing the downward course of imbeciles They urge careful anthropometric studies and observations of somatic diseases other than those of the nervous system in these cases, and are impressed by the fact that many high grade cases would be bettered by more attention being paid to the heart and circulation A careful study of the blood and excretions will be a valuable aid The action of certain alkaloids needs study and experimentation The use of specially directed regulated movements will greatly help these unfortunates They urge also that over exercise should be carefully avoided in their training

FOREIGN

The Lancet May 25

The Pathology and Diseases of the Thyroid Gland WALTER EDMUNDS—Edmunds third lecture discusses chiefly the pathology of goiter and Graves' disease As regards myxedema and cretinism he passes them with briefly saying that the working out of the nature and treatment of these diseases is one of the most brilliant advances in medicine In cases where goiter is the only trouble, he thinks it well established that the administration of thyroid is the best treatment and mentions two cases cured by this method Complete excision of the goiter formerly practiced is now abandoned, though partial excision is still practiced and sometimes causes a satisfactory diminution of the remaining portion Under Graves disease he includes all cases of goiter with symptoms not explained by pressure The question whether the primary lesions is in the nervous system or in the thyroid is discussed and the theory of hypersecretion of the glands as the cause of the trouble is mentioned as supported by the marked contrast between this condition and myxedema He however, holds that it does not follow that the secretion is the same as in health There is proportionately less colloid and in some cases no colloid at all in Graves' disease The changes that are found are practically identical with those of compensatory hypertrophy as seen in animals after partial removal experiments In fact, the resemblance leads to the conclusion that these changes are also compensatory in character, that they are secondary to some defect elsewhere in the system possibly in the parathyroid but there is no evidence either way The treatment of exophthalmic goiter is briefly noticed and the effects of thyroid administration in some cases attended with benefit often has made patients worse Pregnancy is said to benefit it, but the disease sometimes originates in pregnancy Operative methods have been employed They are mainly three operation on the cervical sympathetics operation for diminishing the blood supply by ligating some of the supplying arteries, and operation for the removal of portions of the goiter The first of these is based on the idea that these nerves are the starting point of the disease, but Edmunds thinks the probability is that if the nervous system is the starting point the fault lies rather with the cerebrospinal system and not with the sympathetic Still the latter may be involved in some of the symptoms, the exophthalmus for example Tremors and mental excitement would be connected with cerebrospinal symptoms The results of operation on the sympathetic are rather dubious as Boisson says they have no constancy and are as much confused therapeutically as physiologically The ligation of the arteries to the thyroid has been done with some success but

the operation is one of some difficulty The removal of portions of the gland has been combined in some cases with sudden death accountable for by no other cause and the chief theories in regard to this point are noticed He thinks, however, not withstanding this danger it need not turn us wholly from the operative treatment of the disease, and reports cases where decided benefit has followed In two cases in his own experience there was great improvement The lesson possibly to be learned from the fatal cases is not that operation should not be performed, but that they should be performed earlier

Journal of Hygiene, January

Pathogenic Microbes in Milk E KLEIN —In an examination of 100 samples of milk collected and analyzed at the instance of the medical office of the London County Council, Klein obtained the following results 1 Seven per cent of the samples of "country" milk produced typical true tubercle in the guinea pig 2 Eight per cent of the samples of "country" milk produced typical pseudo tuberculosis (non acid fast bacillus of pseudo tuberculosis A Pfeiffer) 3 One per cent of milk samples produced diphtheria in the guinea pig, yielding the typical true B diphtheriæ 4 One per cent of milk samples caused a chronic disease (in most cases with fatal results) due to a pathogenic torula apparently differing in cultural and physiologic characteristics from the torula (pathogenic blastomycetes) obtained by Sanfelice, Plimmer and others from human cancer 5 Out of the secretions of the cow's udder two pyogenic microbes were obtained B diphtheroides and streptococcus radiatus (pyogenes)

Artificial Modifications of Toxins with Special Reference to Immunity JAMES RITCHIE—The general conclusions of Ritchie's article in regard to this subject are as follows 1 Tetanus toxin under the influence of hydrochloric acid loses with comparative readiness its virulently poisonous properties It does not, however, so readily lose its capacities of producing immunity, and when all trace of toxicity has disappeared the capacity of producing immunity still remains The less poisonous substances produced in the modified toxin are probably of the nature of toxoids 2 Tetanus toxin is also susceptible to the action of alkalies such as sodium hydrate and sodium carbonate, under which it again loses its toxicity 3 Ricin is very resistant to the action of hydrochloric acid There is evidence here also that when the toxicity is destroyed the capacity of producing immunity also remains 4 Abrin is also resistant to the action of hydrochloric acid, but it is relatively susceptible to that of sodium hydrate 5 Diphtheria toxin is very resistant to the action of hydrochloric acid, but it is relatively susceptible to the action of sodium hydrate In the case of toxin which through the latter agent has had its toxicity destroyed there still remains evidence of the capacity of producing immunity

Annales de Dermatologie (Paris), April

Potassium Permanganate in Lupus HALLOPEAU —Four patients were treated with potassium permanganate applied as a dry powder or in a 2 per cent solution The lupus was rapidly improved and the lesions healed Hallopeau believes that besides the caustic action, the permanganate has also something of a specific effect on lupus He suggests that it might be advisable as a preliminary measure to phototherapy, but Finsen has stated that phototherapy has much better chances of success when the lupus has not been treated before with other measures Leredde believes that the better the results from the treatments which merely "improve" without effecting a radical cure, the more dangerous for the patient, as in the case of carcinoma

New Chemico Electric Treatment of Lupus DANLOS —For three years Danlos has been experimenting to derive electricity for the treatment of lupus directly from chemical action He finally succeeded in producing what he sought by a combination of a saturated solution of copper sulphate and pulverized zinc The zinc is stirred into the copper fluid until the color changes The result is a limpid fluid—a solution of zinc sulphate—and a black sediment consisting of zinc and copper This sediment is washed clean and is the substance applied to the lupus in the form of a salve, with a compressing bandage above, until the lupus is destroyed The sound skin is not affected by the electro chemical action of the metals and after the lupus is eaten out, cicatrization proceeds normally under the salve Usually the application does not cause pain, but if there is much ulceration there may be severe pain and tumefaction He has applied this method of treatment to twenty patients with most satisfactory results in every case of tubercular lupus He considers it almost the equal of Finsen's phototherapy and a good substitute therefor when circumstances render the latter impossible When the lupus affects the natural orifices phototherapy is the only resource, but on extensive, flat surfaces Danlos' method will be found much more rapid and fully as effective, and it is within the reach of every practitioner The curette and a concentrated solution of zinc chlorid are preferable, perhaps, for very extensive, deep lesions, unless the patients shrink from the curette, as often happens

Simplified Finsen Apparatus for Phototherapy GASTON Two professors at Lyons, Lortet and Genoud, have devised an apparatus to take the place of Finsen's complicated electric light arrangement for the treatment of lupus They first spent weeks at Copenhagen studying Finsen's plant, and by approaching the source of the electric light to within two or three centimeters of the radiator and suppressing other mechanism, they have succeeded in producing an apparatus which generates the active rays as effectively as Finsen's while it requires no more than the ordinary electric light power and has a much larger photochemical zone of action Leredde reports after six months of constant experience with this new apparatus, that it is a revolution in the treatment of cutaneous affections by the chemical rays, as it brings phototherapy within the reach of every physician who has access to an electric light service Ten to 12 amperes are ample, while Finsen uses 60 to 80 The time of exposure is fifteen minutes instead of the hour required by Finsen, and four patients can be treated at the same time As the surface exposed can be much larger, the number of applications can be correspondingly reduced The apparatus consists of an arc lamp of 10 to 12 amperes, a compressor of rock crystal and an interposed vessel, in both of which there is a double circulation of water A sheet of tin is placed between the two latter, in which an aperture is cut exactly the size and shape of the lesion to be treated

Annales d Mal d Org Gen-Urin (Paris), April

Preservation of Genital Function After Resection of the Epididymis SCADUTO —After resection of the epididymis is it possible to restore the function of generation by establishing a new route for the spermatozoids? Scaduto replies in the affirmative to this question as the result of successful experimentation on dogs He found that an anatomic and functional anastomosis between the vas deferens and the mediastinum of the testis could be readily accomplished, thus re establishing the route destroyed by resection of the epididymis His experiments on large dogs were more successful as the size and shape of the testicles resembled more the human organ The result in one dog was a complete success, spermatogenesis continued normal and the new canal allowed the passage of the spermatozoids Some of the other dogs escaped and in others the new canal was not entirely permeable The conditions are much more favorable for the operation in man, he observes in conclusion

Calculi in the Prostate C PASTEAU—Urinary calculi are frequently found in the prostate and may develop in the prostatic portion of the urethra or its diverticula, or find their way from the upper urinary passages There is another variety of calculi which develop in the prostate itself, true prostatic calculi, which owe their existence to some attenuated infection of the gland Ten specimens are illustrated

Oxycyanid of Mercury in the Urethra and Bladder F L GENOUVILLE —With the sole exception of the abortive treatment of gonorrhea, the oxycyanid of mercury is at least fully as effective as potassium permanganate in treating gonorrheal affections, and is decidedly superior to it in the tolerance displayed by patients It is not a specific for gonorrhea, but is

more effective than other drugs and deserves more general appreciation A 1 per 1000 solution is the average strength, but 1 per 500 is useful in certain cases

Bulletin de l'Acad de Med de Paris, May 14

Musical Sensations in Surgical Anesthesia J V LABORDE—A Paris dentist, Drossner, called Laborde's attention to the fact that as his patients succumbed to the influence of an anesthetic he had noticed that the hallucinations were invariably connected with the sounds from the street below The auditory sensations seem intimately connected with the anesthetic sleep, and the idea occurred to him to substitute for the discordant, terrifying sounds of the street, harmonious, musical sounds He arranged a musical phonograph with a receiver for each ear As the patient took his seat the receivers were placed in his ears and the nitrogen gas administered while he could hear nothing but the music from the phonograph The operation terminated, the patient rouses himself with none of the hallucinations from the street noises, but calm and cheerful as before, and says that he has heard and felt nothing except the music Patients return for a second operation, if necessary, with none of their previous apprehensions, declaring that they have nothing but an agreeable musical memory of the previous operation

Bulletin Medical, Paris, April 13

Renal Insufficiency in the Aged Revealed by the Respiration MEYER—When an elderly person is being palpated and examined generally the respiration is more or less voluntary and normally regular But when he is at rest, if the sphygmograph is applied and the respiration becomes automatic the tracings frequently reveal an unsuspected tendency to an attenuated Cheyne Stokes character Incipient renal insufficiency can thus be determined and impending symptoms averted

Bulletin de la Soc Med des Hop de Paris, May 16

Epidural Analgesia in Treatment of Visceral and Intercostal Pain WIDAL—Sicard's announcement in regard to the value of epidural cocainization as a means of curing the pain of sciatica lumbago, etc has been fully confirmed by Widal's experience The pain is arrested at once and usually permanently In a few cases the pains recurred after a few hours, but always much less severe The intense pain in the stomach accompanying an ulcer with violent exacerbations following the ingestion of even one swallow of milk was completely cured in one case in ten minutes The patient could rise, eat and attend to her duties, free from pain This analgesia has persisted six days to date A single injection of 2 cg of cocain in another case in which the patient had been a victim of severe sciatica without respite from the pains for six months resulted in the immediate banishing of the pain The cocain is injected into the epidural space, external to the meninges, inserting the needle through the sacrococcygeal ligament, between the two small knobs of the apex of the sacrum The injection is simple and harmless The analgesia induced is not sufficient for surgical intervention but proves ample for therapeutic purposes

Progres Medical (Paris), May 11

Hydrosulphuric Acid in Smallpox NOKOWSKI—Several cases are described to demonstrate the benefits of rectal injection of an aqueous solution of hydrosulphuric acid in smallpox The dose varies from 10 mg to 10 cg, according to age In forty to fifty cases the complete development of the pustules and suppuration occurred the third or fourth day and the scabs dropped off the eighth to the tenth Some of the patients were cured on an average of five days with large doses The most serious case was treated with four injections a day for five days and was cured in eight The acid transforms aerobic into anaerobic micro organisms, which alters them in various ways and apparently renders them harmless It is interesting Nokowski adds, to see how the eruption spares the abdomen and neighboring regions after these injections are made, as if a local protection were thrown around this zone

Revue Mens des Mal de l'Enfance (Paris), May

Diagnostic Value of Leucocytosis in Measles RENAUD—A hyperleucocytosis commences with the infection, and attains its maximum eight to nine days before the exanthem appears, that is, four to five days before the contagious period If the leucocytosis is found normal a supposed contagion is a mistake The diagnosis is correct if the number of leucocytes is found increased with no other plausible reason for the increase In one observation, for example, the leucocytes were 16,200 more than the normal number, and of these 13268 were polynuclears

Pathogenesis of Night Terrors J G REY—The cause of the so called night terrors is always some obstacle to respiration and hematosis, either direct or reflex Both are due to slow, protracted intoxication with carbon dioxid

Berliner Klinische Wochenschrift, March 25

Treatment of Varicose Phlebitis KAREWSKI—A small incision at the fossa ovalis exposes the saphena vein, which is divided between two ligatures The vein is then isolated downward and detached from its bed in the subcutaneous fat Another incision is then made 20 cm lower down and the vein is again divided between two ligatures, when the entire trunk between these incisions can be pulled out The side branches bleed as this is done, but this bleeding is always easily checked by brief compression A third incision at the knee allows more of the vein trunk to be resected if necessary After this, the varices are extirpated in turn By this technique a long wound is avoided and scar formation is reduced to the minimum It is peculiarly adapted to fresh varicose phlebitis Six patients thus treated were restored to their occupations in a surprisingly brief time

April 1

Prognosis of Brain Disease in Childhood H OPPENHEIM—Six years ago Oppenheim described a cerebral affection in children—acute hemorrhagic encephalitis—which usually terminates in complete recovery He now describes another affection, the symptoms of which simulate a tumor in the motor zone, and yet it can be considered curable, the patient rapidly recovers under iodin bromid or other measures The same symptoms in an adult would suggest a syphilitic neoplasm or syphilitic meningo encephalitis the Jacksonian epilepsy, monoplegia, motor aphasia, headache, vomiting, slightly retarded pulse and disturbances in sensibility, with the protracted course and the absence of fever There were no syphilitic antecedents in any of the six cases he describes, and all recovered with no recurrence during the five to six years since A tendency to local spasms persisted in one patient for a time but this too, finally disappeared He is inclined to consider the affection a tubercular meningo encephalitis—the "meningite en plaque tuberculeuse" studied by Chantemesse on adults who had died from general tuberculosis or other diseases, that is, only in its severer, fatal and complicated forms, never in children He found it always limited to the vicinity of the fissure of Rolando Oppenheim's six little patients, therefore must have had and recovered from either a hitherto undescribed, chronic, non suppurative encephalitis, or some yet unknown brain affection, exhibiting the symptoms of a cerebral tumor in the motor zone, or else this "meningite en plaque tuberculeuse"

April 22

The Freezing Point of the Blood in Diagnosis A VON KORANYI—When the kidneys are working normally the freezing point of the blood varies between 0 56 and 0 58 C If the freezing point is at 0 59 it is evidence of renal insufficiency, that is of a disturbance in the functions of both kidneys, in the absence of acetonuria and of interference with the respiration The disturbances in the renal function may be of reflex origin, caused by pain in one kidney, while the other may be sound There is also a mechanical renal insufficiency, due to compression of a kidney by a tumor anywhere in the abdominal cavity Both the reflex and the mechanical forms of renal insufficiency must be excluded, of course, before assuming the existence of a bilateral kidney affection from the variation in the freezing point of the blood Other writers claim that the normal range of the freezing point is from 0 56 to 0 60, but Koranyi shows that their results are erroneous, owing to their

failure to eliminate all the carbon dioxid in the blood, which is an indispensable preliminary to determining the freezing point for diagnostic purposes It is easily accomplished by shaking it up with oxygen or even with ordinary air The oxygen is more effectual The freezing point of the blood is normal or subnormal in typhoid fever in the absence of renal complications, and when the increased amounts of carbon dioxid in case of severe bronchitis are removed It is impossible to determine the freezing point with accuracy with less than 10 to 15 c c of blood It is unnecessary to separate the serum, as the freezing point of the blood and the serum is the same Beckmann's apparatus is the only one to use and the directions accompanying it should be scrupulously followed Fifteen minutes are ample for the test and even with an error of 01 it is sufficiently accurate for all practical purposes (See THE JOURNAL, p 475)

May 6

Alkaline Treatment of Pernicious Anemia T RUMPF —Comparative investigation of the blood in a number of cases of pernicious anemia other affections and in health, demonstrated that in pernicious anemia the blood contains an exceptional amount of water and chlorin, while it is very deficient in potassium and iron If pernicious anemia is due to an excessive destruction of blood corpuscles and a relative insufficiency of the blood forming organs, as some maintain, it is possible that the resulting toxic substances in the blood may have an affinity for the potassium found normally in the corpuscles As the potassium is attracted out of the corpuscles by this affinity, destruction of the corpuscles may be the direct result The same affinity may also draw out the potassium from other portions of the body and prevent its assimilation, and certain clinical facts sustain this hypothesis The inference follows that the administration of potassium might arrest or favorably influence the course of this disease Rumpf, reasoning from these premises, applied this treatment in four cases of progressive pernicious anemia, and reports that each patient was improved to the point of actual recovery in consequence His formula was potassium bicarbonate and ferratin, each 5 gm a day or a combination of quinin hydrochlorate 2, ferratin 5 and potassium tartrate and potassium citrate, each 75 In four other more advanced cases the anemia progressed to a fatal termination unchecked It is therefore not a specific but the results attained certainly justify further attempts in the treatment of pernicious anemia with easily assimilated potassium

Dermatologisches Centralblatt (Berlin), May

Success of Refrigeration in Treatment of Ulcus Molle F V POOR —Spraying the ulcer with methyl ethyl or ethyl chlorid—kelene—proved the most effective means of curing ulcus molle in Poor's experience He states that twenty five cases thus treated healed like an aseptic wound in ten to twelve days with an entire absence of complications of any kind He applies the spray for one to one and a half minutes a day until the suppuration ceases and then heals the lesion with the usual antiseptics, iodoform, dermatol or aniol He concludes that the brief, repeated refrigeration of the tissues has a destructive action on certain bacilli, especially Ducrey's or at least checks their development by the hyperemia produced The cure is much more rapid and complications are prevented by this method of treatment

Zeitschrift f Hygiene u Infect (Leipsic), April

Diphtheria Bacilli in Convalescents H PRIP —Careful search was made for the bacilli in 100 convalescents from diphtheria who returned every week for months after their dismissal In 25 per cent the bacilli vanished before the false membranes The bacilli were found in 60 of the convalescents in 3 after twenty-two, eleven and eight months, in 2 after five months, in 5 after four in 6 after three and in 11 after two months A large number failed to return after the second month In 18 convalescents the bacilli reappeared after an absence of one to three weeks and then vanished again In 5 the bacilli suddenly made their appearance in the nose and persisted one to four weeks before they finally vanished The nose had not been involved in the diphtheritic process in any of these cases In one case complicated by otitis media, virulent bacilli were found seventy three days after the membranes had disappeared None of the patient's numerous children contracted the disease In three instances infection of other members of the family followed the return of the convalescent The dismissal occurred after two culture tests had resulted negatively on two consecutive days Prip asserts that no patient should be declared free from bacilli until after months of examination of all the cavities communicating with the throat

Zeitschrift f Heilkunde (Vienna), March

Auto Enteroplastic Surgery —TRNKA —The skin is the best substitute for the mucous coat and walls of the intestines, as has been long established The only flap that ensures absolute solidity to the resistance of the abdominal pressure is a bridge flap containing muscle Trnka operated on a young man, according to these principles, closing a large ragged defect near the iliac fossa, resulting from a typhlitic perforation. He first cut a slightly curved bridge flap above it, including a portion of the rectus muscle The inner edge was sutured to the edges of the intestine and the flap isolated in silk for two weeks A semicircular flap was then cut below the primary defect, with which its base was parallel This flap was then turned over and drawn through beneath the bridge flap The defect was thus closed with a skin flap, held in place and reinforced by a strong bridge flap, and the results have demonstrated the great solidity and permanence of the plastic operation

Zeitschrift f Klinische Med (Berlin), xxiii, 5 and 6

Laceration of Cardiac Valve by External Violence F STRASSMANN —The aorta is involved in two thirds of the rare cases of traumatic laceration of a valve Symptoms may appear at once, or months or years may intervene The physical signs are the same as for a spontaneous valvular affection but the murmur is frequently longer, stronger and has a peculiar tone There is no compensation in these cases and death usually follows in one to three years, but 2 instances have been known of survival for ten, 1 for eleven and 1 for fifteen years, and there are a few cases of complete recovery on record In Strassmann's case a robust man was kicked in the ribs by a horse Two were fractured, the aorta and one of its valves were torn and a chronic pericarditis developed

Bactericidal Action of Bile S TALMA —This article asserts as the conclusion of much research, that the bile contains a substance which checks the development of most of the colon, typhoid and diphtheria bacilli The susceptibility of different bacteria varies and their virulence is not synonymous with the power of producing infection in the biliary passages The bactericidal power of the bile varies at different times and with different animals The epithelium of the biliary passages and the liver cells offer a powerful resistance to the invasion of microorganisms, especially to diphtheria bacilli

Acute Articular Rheumatism and Trauma R BERNSTEIN —The connection is evident between a traumatism and the development of acute articular rheumatism in the seven cases described An infected wound in a joint may cause pyemia, but articular rheumatism was never known to result from such an injury Pyemia may likewise follow a skin wound, and exceptionally articular rheumatism may result Subcutaneous injuries are very rarely followed by pyemia while they have frequently been noted in the immediate antecedents of acute articular rheumatism The incubation is comparatively brief and the trauma can not be incriminated if more than two weeks elapse before the appearance of the articular rheumatism

Grece Medicale (Syra), April

Pathogenesis and Treatment of Albuminuria KELAIDITIS —Two factors co operate in the production of every albuminuria 1, the antitoxic insufficiency of the liver, and 2, the irritating action on the kidneys of the exogenous organic and microbian poisons eliminated without having undergone any preliminary transformation in the liver Whenever from any cause the antitoxic function of the liver is diminished or the amount of toxins is too large for it to manage, then there is hepatic insufficiency, and the untransformed toxins, as they

are eliminated by the kidneys irritate and injure these organs The first indication in treatment is to restrict the patient exclusively to a milk diet and hepatitis supplements this by administering liver extract to substitute the deficient liver function He reports very encouraging results from this combination, although his experience has been limited to two patients with Bright's disease one with glycosuria and three with tuberculosis

Uncontrollable Vomiting of Pregnancy Cured by Suggestion TRIANTAPHYLLIDES—A woman of 30 had suffered from uncontrollable vomiting during her two last pregnancies and it has been arrested only by premature delivery The vomiting occurred again with another pregnancy, but Triantaphyllides performed a sham abortion, gave her some bread pills and the vomiting ceased as she was convinced the pregnancy was terminated

Upsala Laekarefoerenings Foerhandlingar, April

Acute Suppurative Peritonitis K G LENNANDER—Any disturbance in the circulation or slight enteritis, may allow the microbes in the intestines to penetrate into the walls and pass thence into the blood or the lymphatics under the serosa All varieties of solid and fluid exudates may be found in a single abdominal cavity Peritonitis is the result of the reaction of the organism to the infection The greater the amount of fluid exudate, the greater the dilution of the toxins and the less they are absorbed Bacteriologic investigation of the urine is useful in peritonitis as the microbes causing it usually find their way also into the bladder The rectal temperature is always much higher than the axillary in this variety of peritonitis Lennander recommends the subcutaneous injection of 75 to 1 cg of morphin and local anesthesia while the skin and aponeurosis are being incised, then ether or chloroform while the peritoneum is being opened and the cavity examined The ether or chloroform is then suspended while the intestines are being resected or sutured as the abdominal viscera and their peritoneum do not possess any pain nerves The anesthetic is resumed while the intestines are being replaced and the tampon or drain inserted The incision must never include any motor nerves Every effort should be made to recognize the phases of the infection and inflammation of the serous membrane preceding perforation, so as to forestall the latter In all cases of paralysis of the ileum a temporary fistula should be made in the cecum, inserting and fastening a drain, and in general peritonitis in which paralysis of the intestines is threatened, the cecum should be arranged between tampons so that it can be opened at a moment's notice if the tension of the abdominal wall increases In the after treatment, saline infusion is extremely important subcutaneous if the heart action is good and otherwise intravenous As the peritoneal cavity is a great lymph pace, copious saline infusion he thinks, increases the secretion of lymph in it, dilutes the toxins in unoperated cases, and after operation, drains the cavity much more effectively, sweeping the toxins away He injects 1200 to 2000 c c in two portions during the day Opium he administers by the rectum, about 5 cg in a suppository The relief from pain enables the patient to lie still on his back, which favors recovery Local application of ice is also useful If the patient is hungry he injects 100 to 175 c c of olive oil under the skin Every case in which there is reasonable certainty of an abscess or contusion should be operated on To prevent thrombosis in the lower extremities he raises the foot of the bed 10 to 40 cm

Bacterial Endocarditis S E HENSCHEN—Three cases of endocarditis of bacterial origin are described One patient was a girl of 12 who had passed through an acute urinary infection two years before The acute endocarditis of the aorta developed consecutive to tonsillitis and the staphylococcus albus was found in the cerebrospinal fluid during the acute stage The diagnosis was dubious at first suggesting typhoid and then meningitis There were no symptoms of articular rheumatism The case terminated in comparative recovery the third case of endocarditis on record in which recovery occurred after invasion of the blood by bacteria It is the only one in which the staphylococcus was found In his second case a typical articular rheumatism and chorea were accompanied by endocarditis and pure cultures of the staphylococcus albus were derived from the blood, pleuritic effusion and the fluid in the joints The rheumatism and chorea he is inclined to attribute to the action of the bacterial toxins The patient was a boy of 12, with a history of a first attack of articular rheumatism two years previously He died eight days after the acute endocarditis developed The third patient was a man of 48, healthy until June 1899, when he contracted a cold and evidences appeared of an intestinal infection, chills, persistent diarrhea and vomiting These symptoms gradually subsided but recurred again in December and he entered the hospital in January The diagnosis from the symptoms then presented was ulcerative endocarditis and septicemia with aortic insufficiency and acute dilatation of the heart Acute nephritis and bronchitis followed, and patient died in February The colon bacillus was derived pure from his blood during the first weeks in the hospital, but after the administration of salol and salicylic acid, a similar, but non motile bacillus was found in its place and toward the last the streptococcus This case demonstrates anew the possibility that an intestinal infection may spread to involve the endocardium and cause an ulcerative endocarditis of a comparatively chronic course There are very few similar cases in the literature—not more than four and some of these are dubious None of the cases published indicate that the colon bacillus infection has any peculiarly characteristic features

The Iodipin Test of the Functions of the Stomach O V PETERSSON—The iodipin test was tried on nearly fifty persons to investigate the motor function of the stomach, determining the reaction in the saliva with nitric acid and chloroform The other usual tests were also applied to control the results, ascertaining possible retention of the stomach contents with the sound In every instance it was found that when the stomach emptied itself normally, the iodin reaction was evident in thirty minutes on an average In gastric affections with normal motor function the reaction was also prompt, but in every case in which the existence of more or less retention was ascertained by sounding the stomach, the iodin reaction was correspondingly retarded or did not occur at all It was pronounced in three cases of carcinoma in 45 minutes, in two others in 90 minutes, and in one case not even after four and a half hours

Brazil-Medico (Rio de Janeiro), April 22

Cold Baths in Yellow Fever A FERRARI—Three months of experience with cold baths in the treatment of yellow fever have convinced Ferrari of their great efficacy The mortality was reduced to 39 45 per cent and 63 out of the 104 patients thus treated left the hospital completely cured in ten to fifteen days He administers strontium lactate as the best means of controlling the albuminuria in the dose of 2 to 4 gm a day Rectal injection of water at 15 C is also a valuable hydrotherapeutic measure promoting diuresis and lowering the temperature

Queries and Minor Notes

MEDICAL PRACTICE ACT

NEW BUFFALO MICH May 24 1901

To the Editor—Will you please inform me what states recognize the certificates of the Michigan State Board of Registration in Medicine as fulfilling all requirements for a certificate to practice in the particular state H D R

ANS—We can not say what states recognize the certificates of others as it is a matter which is regulated by each board of examiners or registration and no published statement of their rules is available It is safe to say however that there are comparatively few states under the present laws that recognize the certificates of other states

QUESTION OF ETHICS

SUMMIT STATION OHIO June 3 1901

To the Editor—Would it be ethical for a regular physician to consult with a physician who has graduated from a regular school and afterwards taken a course in homeopathy and who now claims to practice either according to the patient's desire? C H W

ANS—We should say not according to the spirit of the Code

Books Received

Acknowledgment of all books received will be made in this column, and this will be deemed by us a full equivalent to those sending them A selection from these volumes will be made for review, as dictated by their merits, or in the interests of our readers

A PRACTICAL TREATISE ON DISEASES OF THE SKIN, for the Use of Students and Practitioners By James Nevins Hyde, A M, M D, Professor of Skin Genito Urinary and Venereal Diseases, Rush Medical College, and Frank Hugh Montgomery, M D, Associate Professor of Skin Genito Urinary and Venereal Diseases Rush Medical College Sixth and Revised Edition Illustrated with 107 Engravings and 27 Plates in Colors and Monochrome Cloth Pp 828 Price, $4 50 Philadelphia and New York Lea Brothers & Co 1901

A SYSTEM OF PHYSIOLOGIC THERAPEUTICS A Practical Exposition of the Methods, Other than Drug Giving, Useful in the Treatment of the Sick Edited by Solomon Solis Cohen, A M, M D, Professor of Medicine and Therapeutics in the Philadelphia Polyclinic Volume XI, Electrotherapy, by George W Jacoby M D, Consulting Neurologist to the German Hospital, New York City in two books Book II, Diagnosis Therapeutics Illustrated Cloth Pp 323 Eleven volumes Price, $22 net Philadelphia P Blakiston's Son & Co 1901

A TREATISE ON ORTHOPEDIC SURGERY By Royal Whitman M D, Instructor in Orthopedic Surgery and Chief of the Orthopedic Department of the Vanderbilt Clinic in the College of Physicians and Surgeons of Columbia University Illustrated with 447 Engravings Cloth Pp 650 Price $5 50 net Philadelphia and New York Lea Brothers & Co 1901

COAKLEY ON THE NOSE AND THROAT The Diagnosis and Treatment of Diseases of the Nose, Throat Naso Pharynx and Trachea For the Use of Students and Practitioners By Cornelius G Coakley, M D, Professor of Laryngology in the University and Bellevue Hospital Medical College, New York Second edition 103 Engravings and 4 Colored Plates Cloth Pp 556 Price $2 75 net Philadelphia and New York Lea Brothers & Co 1901

APPENDICITIS ITS PATHOLOGY AND SURGERY By Charles Barrett Lockwood F R C S, Assistant Surgeon and Lecturer on Descriptive and Surgical Anatomy in St Bartholomew s Hospital Cloth Pp 287 Price, $2 50 London and New York Mac Millan & Co 1901

HEALTH AND HYGIENE FOR THE HOUSEHOLD By John Joseph Nutt, B L, M D Member of the American Medical Association Cloth Pp 69 Price, 50 cents New York The Abbey Press

TRANSACTIONS OF THE TWENTY SECOND ANNUAL MEETING OF THE AMERICAN LARYNGOLOGICAL ASSOCIATION Held in the City of Washington, D C, May 1, 2 and 3, 1900 Cloth Pp 235 New York Carey Printing Co 1901

THE EXTRA PHARMACOPEIA By William Martindale, F L S F C S, Late President and Examiner of the Pharmaceutical Society, and W Wynn Westcott M B Lond, D P H Coroner for Northeast London Tenth Edition Cloth Pp 688 Price, 10 shillings, 6 pence London H K Lewis 1901

PROCEEDINGS OF THE PHILADELPHIA COUNTY MEDICAL SOCIETY April Paper Pp 56 Price, 15 cents per copy Philadelphia Published by the Society

PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF PHILADELPHIA May Paper Pp 35 Published by the Society 1901

ANNUAL REPORT OF THE BOARD OF HEALTH OF THE CITY OF WINONA, MINN, for the Year Ending March 31, 1901 Paper Pp 10 Winona, Minn Joseph Leicht Press

EIGHTH ANNUAL REPORT OF THE STATE CHARITIES AID ASSOCIATION to the State Commission in Lunacy November 1 1900 Second Edition Paper Pp 27 New York United Charities Aid Association

EIGHTEENTH REPORT OF THE STATE BOARD OF HEALTH OF WISCONSIN September 30, 1900 Paper Pp 289 Madison, Wis Democrat Printing Co 1901

The Public Service.

Army Changes

Movements of Army Medical Officers under orders from the Adjutant General's Office, Washington, D C, May 23 29, 1901, inclusive

Thomas C Chalmers, major and surgeon, Vols, leave of absence from the Department of California extended

Matthew A DeLaney, contract surgeon, member of a board at Fort Monroe, Va, vice Contract Surgeon Charles N Barney relieved, to examine enlisted men for commissions

Euclid B Frick, captain and asst surgeon, U S A, member of a board at San Juan, P R, to examine officers of the Army as to their fitness for promotion

Herbert W Hatch, contract surgeon, from the Department of Alaska, to San Francisco, Cal, for annulment of contract

Louis T Hess lieutenant and asst surgeon, U S A, from the General Hospital, Presidio of San Francisco, Cal, to duty at the General Hospital, Fort Bayard, N M

Francis J Ives, major and surgeon U S A, member of a board at Fort Sheridan, Ill, to examine officers of the Army as to their fitness for promotion

William R S Jones, contract surgeon, member of a board at San Juan, P R, to examine officers of the Army for promotion

William P Kendall, major and surgeon, U S A, now in New York City, to proceed to Washington, D C, on official business and thence to Fort Slocum, N Y

B Albert Lieberman, major and surgeon, 33d U S Infantry, honorably discharged from the service of the United States, his regiment having been mustered out

Charles B Mittelstaedt, contract surgeon, from San Francisco, Cal, to Fort Ethan Allen, Vt, for post duty

Arthur B Smith, contract surgeon, from the General Hospital, Fort Bayard N M, to Ravenna, Ohio, for annulment of contract

Frederick H Sparrenberger, captain and asst surgeon Vols, leave of absence from the Department of California extended

Frank P Stone, contract dental surgeon, from Washington, D C, via San Francisco, Cal to Manila, P I, for assignment in the Division of the Philippines

Samuel S Turner contract surgeon, member of a board at Fort Sheridan, Ill, to examine officers of the Army for promotion

Navy Changes

Changes in the Medical Corps of the Navy for week ended June 1, 1901

Dr J H Iden, appointed asst surgeon in the Navy, from May 4 1901

Medical Director W S Dixon, commissioned medical director from April 28 1901

Medical Inspector C G Herndon, commissioned medical inspector from April 28, 1901

P A Surgeon E V Armstrong, detached from *Vermont*, and ordered to Key West Naval Station for duty at Dry Tortugas

Asst Surgeon T M Lippitt, ordered to the Washington Navy Yard, June 1

Asst Surgeon R B Williams, detached from duty at Dry Tortugas and ordered home to be in readiness for sea duty

Asst Surgeon J H Iden, ordered to Naval Hospital, Chelsea, Mass, for duty

P A Surgeon J F Costigan detached from the *Yorktown* and ordered home Resignation to be accepted after arrival

Asst Surgeon W M Garton, detached from the Washington Navy Yard June 1 and ordered to the *Indiana*

Asst Surgeon H O Shiffert, ordered to the *Nashville*

Asst Surgeon L Thompson, ordered to the *Solace*

Asst Surgeon R K McClanahan, ordered to the *Culgoa*

Pharmacist J Cowan detached from the Manila and Cavite Naval Station and ordered to Naval Hospital, Yokohama, Japan

Health Reports

The following cases of smallpox, yellow fever and plague have been reported to the Surgeon General, U S Marine-Hospital Service, during the week ended June 1, 1901

SMALLPOX—UNITED STATES AND INSULAR

California San Francisco, May 11 18 5 cases
Illinois Chicago May 18 25 7 cases
Iowa Clinton May 18 25, 2 cases
Louisiana May 18 25, New Orleans, 7 cases Shreveport, 1 case
Maryland Baltimore, May 18 25, 2 cases
Massachusetts May 18 25 Boston 3 cases Fitchburg 1 case Marlboro 1 case, New Bedford 2 cases
Michigan Detroit, May 18 25, 67 cases
Minnesota Minneapolis, May 18 25, 9 cases, Winona, May 11 18, 1 case
Nebraska Omaha, May 11 18, 9 cases
New Hampshire Manchester, May 18 25, 5 cases
New Jersey May 18 25, Camden, 1 case Newark, 2 cases 1 death *Passaic, 1 case*
New York New York May 18 25, 134 cases 13 deaths
Ohio Cincinnati, May 17 24, 4 cases, Cleveland, May 18 25, 39 cases 1 death
Pennsylvania May 18 25 Erie 1 case Lebanon, 8 cases, Philadelphia, 3 cases Williamsport 1 case
Tennessee May 18 25, Memphis, 6 cases, 2 deaths Nashville, 2 cases
Utah Salt Lake City, May 11 18, 5 cases
Washington Tacoma May 12 19 1 case
West Virginia Huntington, April 13 May 24, *48 cases*
Wisconsin Green Bay May 19 26, 6 cases
Philippine Islands Manila March 23 April 13, 35 cases
Porto Rico Ponce April 27 May 4, 5 cases

SMALLPOX—FOREIGN

Austria Prague April 27 May 4 3 cases
Brazil Rio de Janeiro, April 1 15, 3 deaths
Belgium Antwerp April 27 May 4 5 cases, 2 deaths
China Hongkong April 6 13 6 cases 6 deaths
Ecuador Guayaquil March 30 May 11 3 deaths
Egypt Cairo, April 15 May 16, 4 deaths
France Paris April 27 May 4 5 deaths
Gibraltar May 6 12 2 cases
Great Britain *England*—Liverpool, May 4 11 2 cases London, May 4 11, 1 case *Scotland*—Dundee, April 27 May 11, 10 cases Glasgow May 3 11, 4 deaths
Italy Naples April 30 May 12 296 cases, 57 deaths
Mexico Mexico May 11 18, 1 case
Nicaragua May 16, Grenada, present, Masaya, present Managuas present
Russia Moscow April 21 27 9 cases, 2 deaths Odessa, April 27 May 4 5 cases 2 deaths St Petersburg, April 20 May 4 21 cases 4 deaths Vladivostock, Oct 1 31, 1 case, Warsaw, April 20 27, 7 cases
Spain Malaga, May 4 11 1 death Valencia, April 27 May 11, 2 deaths
Straits Settlements Singapore March 30 April 13, 3 deaths
Uruguay Montevideo, March 16 23, 5 cases

YELLOW FEVER

Brazil Rio de Janeiro April 1 13, 31 deaths
Colombia Panama, May 6 20, 7 cases
Cuba Havana, May 11 18 3 cases

PLAGUE—INSULAR

Philippine Islands Cebu, April 4, 1 case Manila, March 23 April 13, 76 cases, 64 deaths

PLAGUE—FOREIGN

Japan Formosa, April 21-28 *170 cases*, 111 deaths
Turkey Baara, May 13 3 cases

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Addresses

THE CAUSE OF DIFFUSE PERITONITIS COMPLICATING APPENDICITIS AND ITS PREVENTION

CHAIRMAN'S ADDRESS, DELIVERED BEFORE THE SECTION ON SURGERY AND ANATOMY, AT THE FIFTY SECOND ANNUAL MEETING OF THE A M A. AT ST PAUL, MINN, JUNE 4 7, 1901

A J OCHSNER, M D
CHICAGO

Every surgeon who treats patients suffering from acute appendicitis must be impressed with the fact that an unfavorable outcome in any given case means that the infection which was originally confined to the small space occupied by the vermiform appendix itself has first invaded the tissues immediately surrounding this organ and has then been distributed over the entire peritoneal cavity In other words, in fatal cases the patient practically always dies as the result of a diffuse peritonitis

Other conditions may arise which may result in a fatal issue There may be a septic thrombosis of the vessels in the vicinity of the appendix or an empyema, or even pyemia, but by far the greatest number of deaths occurs from diffuse peritonitis, and if it is possible to prevent this, the mortality from appendicitis must at once fall enormously In order to plan a means for the prevention of this condition, it is well to study the progress of the disease from its onset

There is danger of the occurrence of diffuse peritonitis in the following classes of cases 1 in gangrenous appendicitis, 2, in perforative appendicitis, 3, in cases in which the cecal end of the lumen of the appendix is closed and the distal portion so thoroughly distended with septic material as to make its walls permeable to micro-organisms, 4, in the very rare cases in which there are small abscesses in the walls of the appendix not directly connected with its lumen, and 5, in cases in which there is a septic thrombosis of some of the vessels, but not sufficient to cause gangrene

The first, second and third conditions are so common that every surgeon who operates frequently during the acute attack has seen them many times

Were it possible to keep the septic material in these cases within the circumscribed area in which it occurs primarily, it is plain that the condition would remain comparatively harmless

ANATOMICAL CONDITIONS INVOLVED

The appendix is virtually surrounded on all sides excepting in the direction of the median line by relatively fixed tissues Above we find the lower end of the cecum and the cecal end of the ileum to the right and in front is the parietal peritoneum, behind the peritoneum covering the iliacus muscle, and toward the median line it is surrounded by loops of small intestines Moreover, the omentum extends far beyond its lower end

It is true that the appendix may be displaced downward, but in this case it will again be surrounded by fixed tissues which seem especially adapted to dispose of septic material Again in this case there is an enteroptosis affecting the cecum, and always with this a marked lowering of the transverse colon and stomach and with these the omentum

Thus we see that the natural anatomical arrangement for the protection of the general peritoneal cavity is extremely efficient There is but one weak point in the anatomical provision for this protection, namely, in the direction of the median line, because the great mobility of the small intestines naturally favors the distribution of septic material to all parts of the peritoneal cavity

If we can prevent the small intestines from doing harm in this direction, we will have accomplished our end theoretically at least

At this point I wish to direct your attention to another important anatomical condition The blood supply of the omentum is so enormous that it will readily dispose of a very severe infection by walling off the surrounding structures if it is permitted to give its physiological attention to a single area

It is a well-known fact which every one who frequently operates during the acute attack of appendicitis has had many opportunities to observe, that the omentum crowds itself about any inflammatory or traumatic lesion within the peritoneal cavity the moment the latter occurs, and if left undisturbed a few hours will suffice to cause efficient protective adhesions

These adhesions become stronger every hour and the blood supply in the omentum becomes greater, so that if no disturbance arises one can reasonably expect efficient protection to the general peritoneal cavity from the omentum

Another important fact must not be lost sight of in this connection The fact that the surrounding structures are relatively fixed in position favors the condition of rest of the inflamed part and permits the omentum to act after the manner of a splint applied to an inflamed joint The value of rest as a preventive to the extension of an infection in any part of the body can not be overestimated Consequently if it is possible for us to secure this condition of rest we have gained another important point in the right direction

In case the appendix is displaced upwards its position is even more favorable, because the available amount of omentum is thus increased Again, if the appendix is retrocecal in its position, which is very frequently the case, the infection of the general peritoneal cavity is more easily prevented than when in its normal location If anteriorly misplaced it is likely to be fastened to the anterior abdominal wall by the adherent omentum

PERISTALTIC MOTION OF THE SMALL INTESTINES

It is plain then, that the infection of the general peritoneal cavity must occur from a disturbance on the part of the small intestines and must be due to their peristaltic motion

It is significant that in almost all cases of severe acute appendicitis the obstruction to the passage of gas and intestinal contents through the ileo-cecal valve is one of the early symptoms Nature is trying to prevent this very dangerous disturbance by closure of the ileo-cecal valve We have a condition corresponding to the contraction of the muscles surrounding an inflamed joint to the closure of the eyelids in conjunctivitis etc Moreover the muscles overlying the appendix become tense Everything tends toward the establishment of conditions of rest in the vicinity of the inflamed organ

THE EFFECT OF THE INTRODUCTION OF ANY KIND OF FOOD OR CATHARTIC INTO THE STOMACH

It is a fact which has been demonstrated a great number of times that peristalsis does not occur unless food or cathartics are introduced into the stomach If the attack occurs shortly after a meal and before all of the food has passed through the ileo-cecal valve, its presence may cause peristaltic motion in the small intestines Upon reaching the ileo-cecal valve the latter may prevent its passage into the cecum, causing return peristalsis, and the intestinal contents are forced back into the stomach, whence it may be expelled by vomiting or be again forced into the small intestine giving rise to further peristaltic motion Moreover it will give rise to the formation of gas, which must cause disturbance and pain in its attempt to pass the ileo-cecal valve

This motion it is plain will be harmful primarily from the fact that it gives rise to pain by disturbing the sensitive inflamed tissues and secondarily from its likelihood of carrying infectious material with which it has come in contact in the vicinity of the inflamed appendix to other parts of the peritoneal cavity

Besides this the physiological attention of the omentum can now no longer be directed to the single area of infection, because other parts of the peritoneal cavity require its protection, and such portions of the omentum as are not yet thoroughly adherent about the inflamed appendix are likely to be diverted from this point

Theoretically, then, the disturbance which is to be feared to so great an extent is caused by the presence of food or cathartics in the stomach, and its logical remedy would be to absolutely prevent the introduction of any form of food or cathartics into the stomach and the removal by gastric lavage of any portion of food which may be retained in the stomach at the beginning of the attack It may be necessary to perform gastric lavage twice or at most three times in order to entirely remove remnants of food which may have regurgitated into the stomach from the small intestines by reason of return peristalsis

That this is not only true theoretically, but also in practice, I have demonstrated in a large number of cases, and many other surgeons who have followed the same plan of treatment have informed me of the fact that their experience has agreed with mine

It is true that a few surgeons have reported failures with this method, but an investigation of their treatment in each instance has shown that they disregarded one of the three cardinal points in the treatment They either gave just a little liquid food by mouth, or they gave some form of cathartics or disturbed the rest of the intestines by giving large enemata, or they neglected removing the stomach contents by gastric lavage

Of course, the slightest amount of food is sufficient to start peristaltic motion of the small intestines, and the same is true of cathartics, and consequently if either of these features in the treatment is omitted one can not hope for the same results

It does not matter what form of appendicitis may be present in any given case it seems clear that this form of treatment must be useful, because in the milder cases it will result in rest of the affected part, and consequent rapid resolution, while in the severe cases it will guard against mechanical distribution of infectious material, and in all cases it reduces the tendency to meteorism and stops the pain

There is, however, one class of patients in which I have found this treatment of the greatest value I refer to the class in which the appendix is gangrenous or perforated and in which there is already a beginning general peritonitis These patients give the impression of being extremely ill There is complete obstruction to the passage of gas or feces There is nausea or vomiting and marked meteorism, the pulse is small and quick, usually there is high fever but the temperature may be subnormal, respiration is rapid, and the abdominal muscles overlying the appendix are tense The patient is in a condition in which I formerly operated at once, day or night, as a last resort, only to find that it was too late in more than one-third of the number of cases, the mortality increasing with the time that had elapsed since the beginning of the attack In this class of cases there is still a recovery of over 90 per cent if the principles laid down above will be thoroughly applied

If peristalsis is absolutely inhibited, as it can be the infection will still become circumscribed and the pus can be evacuated with safety Moreover, the condition I have just described is in itself the result of the administration of food and cathartics Had these patients received neither food nor cathartics from the beginning of their attack, the condition would never have advanced to this dangerous point This refers particularly to a class of cases which Richardson has so well described as being "too late for an early and too early for a late operation"

If the plan I have outlined above is carried out the following changes are likely to occur The nausea and vomiting will cease after one or two, or at most three, gastric irrigations The meteorism and the pain will decrease greatly during the first twelve hours and will almost completely disappear in twenty-four hours The pulse becomes slower and firmer and more regular, the breathing deeper and the patient's general appearance improves to an astonishing extent If the temperature was high, it will go below 100 F the first twenty-four hours, and in three days it will be practically normal The abdominal muscles will become soft as soon as the stomach contents have been removed by gastric lavage

Usually the improvement is so rapid that one is tempted to spoil everything by giving nourishment by mouth because the patient's condition does not seem serious enough to warrant such severe measures

That this form of treatment, which I have employed since 1892, at first only in selected cases, and later more and more generally is really of great value is shown by clinical results My mortality in cases of perforative or gangrenous appendicitis with beginning diffuse peritonitis is less than one-fourth as high as it was in the cases operated at once upon making the diagnosis and even in advanced cases of diffuse peritonitis there has

been a marked decrease in the mortality in my experience

It might be said that these cases were not due to perforative or gangrenous appendicitis, but that they were simply severe catarrhal cases, which are known to result favorably under any form of treatment To this I would respond, that I have later removed the appendices in many of these cases and have almost invariably demonstrated the correctness of the diagnosis

In my statistics I utilize only the cases which I have operated in the Augustana Hospital, because of these I have full and accurate records, while of those operated in other hospitals and in private homes my records are not accurate, because there the patients and assistants are not so completely under my control

From Jan 1 1898, to May 1 1901, I have operated in this hospital upon 565 appendicitis cases which I have divided into three groups 1, those who entered the hospital suffering from diffuse peritonitis, 2 those who entered the hospital suffering from gangrenous or perforative appendicitis, and 3, those who entered the hospital suffering from recurrent appendicitis in the interval between attacks or at the beginning of a recurrent attack when the infectious material was still confined to the appendix Of the first class I treated 18 cases, with 10 deaths, 55 5 per cent mortality, of the second class I operated 179 cases with 9 deaths 5 per cent mortality of the third class I operated 368 cases with one death, 1/3 per cent mortality Total, 565 cases with 20 deaths 3 5 per cent mortality

These statistics contain all patients who entered the hospital suffering from appendicitis, even those who died few hours after admission from general peritonitis, a

Of classes 2 and 3, all were operated, so there can be no doubt concerning the diagnosis Of class 1 all but 4 were operated, and these were in an absolutely hopeless condition when they entered the hospital I will state also that during this time no patient suffering from appendicitis was refused admission into the hospital

Judging from the authorities upon this subject, our mortality of 55 5 per cent in diffuse peritonitis is as low as that recorded by any of the authors whose statistics contain a considerable number of these cases while some authors with less than half this number report as low as 20 per cent mortality Krogius has compiled the statistics of 58 authors whose combined mortality is a little over 70 per cent

As compared with my own experience in former years when all of these cases were treated surgically at once, my experience in this series of cases of diffuse peritonitis following appendicitis is quite encouraging

It is in the second class however in which the greatest benefit from the treatment is found In this class, according to most modern authorities, Murphy, Mynter, Porter, Lennander Bull, and many others, there is a mortality of at least 20 per cent This in my cases has been reduced to 5 per cent , and had the treatment been instituted at the beginning of the attack, I am certain that the mortality could easily have been reduced to one-half of this In class 3 there should have been no death Many of these cases had been treated through their acute attack by the method I have described, before being sent to the hospital But as not all of the cases I treated outside of the hospital came later to operation, it is not fair to utilize these in demonstrating the value of the method

Again I have treated a large number of cases through the acute attack of appendicitis with this method which have never been operated and which I have not included in my statistics, because the correctness of the diagnosis could not be established by actually demonstrating the condition present in the appendix

However the fact that there was a mortality of less than one-third per cent in so large a number of cases is significant It shows the value of a method by which cases of acute appendicitis in whom an operation is bound to give a high mortality at best, can be changed to chronic appendicitis in which the mortality following operation is almost nothing

It would require too much space to tabulate all the cases treated by this method, but in order to give a clear idea of the character of these cases I have appended the histories of the cases suffering from perforative or gangrenous appendicitis which were treated through the acute attack during the past four months in the Augustana Hospital by means of the method I have described, and in which the correctness of the diagnosis was subsequently demonstrated by removing the diseased appendix during the operation

In the same time I have treated many cases of acute perforative or gangrenous appendicitis in consultation with other physicians in private houses, but as these diagnoses have not been proven by the removal of the diseased organs they cannot be included in this list, although they corresponded with those who were operated both as regards the outcome and the conditions present during the attack, and there can be no reasonable doubt regarding the diagnosis

It is, of course not possible to come to any definite conclusions from a collection of statistics, because there are so many differences which can not be balanced

One hospital may be largely filled with patients from the lowest and least intelligent classes, which would indicate that the patients enter only after they are in an exceedingly serious condition Another hospital may have a more intelligent class, and hence the cases are in a more favorable condition at the time of admission Again, as an institution becomes known for the treatment of these cases a larger number of relatively hopeless cases will be sent there, hence I believe it is practically impossible to draw fair conclusions from statistics, and one must depend largely upon personal experience

Among these cases, No 8896 is especially instructive, because it illustrates the danger of operating too early The patient entered the hospital five days after the beginning of the attack His condition was exceedingly grave, as indicated in the history With an immediate operation I should have expected his death within thirty-six hours

The diagnosis was made of gangreneous appendicitis He was placed on exclusive rectal feeding Within twenty-four hours his pain had entirely disappeared, his general appearance improved greatly, the meteorism subsided, his temperature fell 3 degrees, his pulse came down forty beats per minute his abdominal wall became soft, and twenty-four hours later I began to doubt my diagnosis At the end of the fourth day his condition had improved so much that, upon his request, I concluded to operate because he was normal in every respect with the exception of a slight induration in the region of the appendix and pain upon deep pressure It seemed to me as though the process must have stopped just short of a perforation Had he been left without an operation there could be no doubt but what he would recover temporarily from his attack It seemed perfectly safe to operate

Upon opening the abdomen I found a perforated gan-

grenous appendix surrounded by a small abscess completely walled off by the omentum I removed the appendix and the surrounding pus with great care and drained the cavity, expecting the patient to recover, but a diffuse peritonitis developed, from which he died five days later This case impresses the lesson, that it is not wise to operate until the patient has fully recovered from the acute attack Of course, he should be cautioned as regards his diet in order to prevent a recurrence but I am confident that the mortality in my practice will be still smaller in the future, especially because I shall wait longer after the acute attack before removing the appendix

The danger of rupture of a circumscribed abscess into the general peritoneal cavity has been the cause of great anxiety My experience has led me to conclude that this practically never happens unless food or cathartics are given by mouth In my entire experience it has happened but once, in a child 7 years old, which was brought to the hospital on the fifth day after the beginning of an attack of gangrenous appendicitis with beginning diffuse peritonitis It had received food and cathartics constantly since the beginning of the attack and although its condition seemed hopeless either with or without an operation, it improved slightly from day to day under exclusive rectal feeding, but never became well enough to make drainage of rather an extensive infection of the entire area between the umbilicus and pubis and right anterior superior spine of the ilium safe and still, had I anticipated the likelihood of a rupture into the remaining portion of the peritoneal cavity I should certainly have made the attempt with the hope of bringing about a recovery

On the fifth day the abscess suddenly ruptured I anesthetized the boy within half an hour made a free incision, washed out the peritoneal cavity, drained freely, but the child died in six hours

In this case gastric lavage had not been employed because the child was very nervous and we feared the effects of the fright

I have frequently seen cases in which food and cathartics were given in whom this accident occurred

Aside from the benefit to the patient of increased safety there are other advantages to be derived from this plan of treatment, which are well worth considering Being able to operate during the quiescent state, drainage is not indicated, and consequently there is no likelihood of the occurrence of post-operative ventral hernia With the reduction of the area of infection, the amount of peritoneal adhesions must necessarily be reduced As a matter of experience, I can say that fecal fistulæ almost never occur in cases treated by this method

Of course all these advantages as well as the prevention of diffuse peritonitis can be accomplished if the appendix is removed during the very beginning of the attack, before the infectious material has passed beyond the walls of the appendix, but unfortunately it is but very seldom that a patient enters the hands of a surgeon at so early a stage

The following consecutive histories illustrate the class of cases in which the form of treatment is indicated and also the progress of these cases under this form of treatment The number at the beginning of each history is for the purpose of identification in the Augustana Hospital records

No 8573—Master Harold B, school boy, 7 years of age operated on Jan 9 1901 gave the following history He had whooping cough at 3 weeks of age, otherwise he had been well Fifteen months ago patient was taken with headache, vomiting pyrexia 100 F, and pain in abdomen only on pressure in right inguinal region Then perfectly well until six weeks ago, when patient was again taken with headache, vomiting, pyrexia and tenderness in right inguinal region The abdomen was severely distended with gas The attack was much more severe than the first one Patient placed upon exclusive rectal alimentation for two weeks Headache and vomiting left him in a day, but tenderness has persisted, and he has usually had slight evening rise of temperature of about 100 F

Present Condition Well developed, fairly well nourished slightly anemic, temperature 99 4, pulse 90, regular and strong Appetite good, bowels constipated, heart and lungs normal Abdomen slightly distended, quite tympanitic, except lower portion of left inguinal region At times tenderness at right inguinal region

Treatment McBurney's incision 6 cm long Appendix 7 inches long, curved on itself back behind to cecum, is adherent to posterior surface of cecum Appendix is ulcerated to an extent approaching perforation, contains several concretions The lymphatics in the mesentery are enlarged to size of army bean Appendix crushed with strong forceps at cecal end Stump inverted with silk purse string suture No drainage Wound closed Dry dressings Straps Patient recovered normally, leaving hospital Feb 5, 1901

No 8582—Master Jerome R, 8 years of age, operated on Jan 28, 1901 gave the following history Patient experienced the ordinary diseases of childhood At the age of 1½ years he had peritonitis and was very ill for three weeks On Jan 1 1901, he felt indisposed, having eaten an unusual amount of nuts the night before, and on the following morning he suffered from severe pain in the abdomen, accompanied with vomiting and diarrhea The pain was paroxysmal in character, became located in the right inguinal region on the second day The bowels became distended with gas, and after the first day there was complete obstruction to the passage of gas and feces Vomiting persisted for five days, until patient absolutely refused to take food, when the vomiting ceased Entered hospital Jan 9, extremely ill with diffuse peritonitis The abdomen was greatly distended with gas and extremely tender Temperature 102 F, pulse 120 He was placed on exclusive rectal alimentation, whereupon he improved rapidly On January 17 his pulse and temperature were normal, his abdomen was but very slightly distended, his complexion and facial expression were good There was slight tenderness in the hypogastric and right inguinal region His heart, lungs and kidneys were normal He was now given beef tea by mouth, but the rectal alimentation was continued There was an area of induration in the vicinity of McBurney's point which persisted Exclusive rectal feeding was continued for three weeks

On Jan 28 1901, four weeks after the beginning of the attack, an abdominal section was made through the right rectus abdominis muscle 6 cm long, opposite McBurney's point The peritoneum was found congested, the intestines empty In front of the right iliacus muscle was found a mass consisting of the cecum the omentum and the cecal end of the ileum, surrounding a circumscribed abscess containing the perforated appendix and a number of fecal concretions The appendix was removed, the stump inverted the wound drained with gauze and glass drains The appendix contained a perforation 3 cm from its end The peritoneal cavity contained a considerable quantity of sero sanguinous fluid The patient left the hospital well April 2, 1901

No 8589—Mr Anton N a fireman 23 years of age entered the hospital Jan 10 1901 He gave the following history Aside from having experienced the diseases of childhood, he had always been well In May 1900 he experienced a mild attack of acute appendicitis continuing for five days Felt well after this until 18 days ago when patient again experienced severe pain first in the epigastric region, which became localized in the vicinity of the appendix He suffered from diarrhea and vomiting for one day

Under treatment with exclusive rectal diet the pain which was at first very severe decreased rapidly and disappeared in

five days, leaving only soreness for ten days longer The rectal feeding was continued for two weeks

Present Condition The patient is well nourished, the tongue is clean, appetite good, bowels constipated, heart, lungs and kidneys normal, temperature 98 6, pulse 80, regular and strong There is some tenderness and resistance a little below McBurney's point

Operation January 11 McBurney's incision 5 cm long Appendix coiled upon itself and adherent throughout between cecum and iliacus muscle, perforated 2 cm from end into cecum The wound in the latter had healed The appendix was exceedingly brittle, edematous and congested and its lumen was almost completely obliterated at the cecal end The appendix was removed and its stump inverted into the cecum and the space closed by purse string suture The abdominal wound was closed The patient recovered normally, leaving the hospital on Feb 12, 1901

No 8630—Mrs David B, 46 years of age, was operated on Jan 23, 1901 The patient is so deaf that it was difficult to obtain a history She has been married for 22 years, has had seven pregnancies, the last one 10 years ago Has had two miscarriages For several months she has suffered from incomplete intestinal obstruction, accompanied with nausea and eructation of gas and indefinite pain in the abdomen A diagnosis of chronic appendicitis had been made, but during the past two weeks her condition has been more serious, her deafness, however, makes it impossible to obtain a definite history except that she is and has been very ill Her facial expression is bad, her abdominal walls tense She complains of pressure over the entire abdomen, but especially over the region of McBurney's point and in the region of the sigmoid flexure of the colon She had traveled a distance of 400 miles by rail and was extremely exhausted She was placed in bed and given exclusive rectal alimentation for four days Her heart, lungs and kidneys were normal and her general condition improved under this treatment, under which she had been for a week before entering the hospital An exploratory incision 5 inches in length was made in the median line and the appendix was found surrounded by omentum The former was perforated a short distance from its distal extremity and at this point was found a small abscess containing a dram of pus and an enterolith The appendix was removed, together with the portion of the omentum containing the abscess The patient developed a pneumonia four days after the operation from which she recovered as well as from her operation She left the hospital March 9, 1901

No 8699—Miss Freda W, 20 years of age, operated on Feb 3, 1901, gave the following history Patient has experienced all of the children's diseases At the age of 9 she injured her knee joint by falling upon broken glass The wound became infected and patient was extremely ill for several months, recovering with an ankylosed joint Menstruated at 13, regular and painless for two years since then has suffered considerable pain, more especially in the right side, lasting from two hours to two days at each period For the past four years, patient has been anemic nervous and not very strong Seven months ago she began to have occasional pains in the region of McBurney's point at intervals of about two weeks, most severe however during menstrual period Her appetite was bad, her digestion impaired her nervousness increased About Nov 1, 1900 the pain became persistent and was accompanied with nausea and eructation of gas

On December 16 patient suffered from an exceedingly violent acute attack of appendicitis characterized by extreme pain nausea vomiting and a distinct chill pulse increased to 130 per minute temperature 100 F No food of any kind was given after the beginning of the attack She was kept on exclusive rectal alimentation for ten days One hypodermic injection of one fourth grain morphia was given the first day The pain subsided within twenty four hours but the patient's general condition was bad on account of the severeness of the attack There was tenderness in the vicinity of McBurney's point for two weeks which continued upon pressure until the time of the operation Ten days after the beginning of the attack she was given beef tea by mouth for four days then liquid diet for two weeks, then light diet until the time of the operation

Present Condition Fairly well nourished, but anemic, appetite fair, bowels regular Eructations of gas after eating Heart, lungs and kidneys normal Slight pain in the region of McBurney's point upon deep pressure Ankylosis of right knee at angle of 165 degrees

Treatment McBurney's incision 6 cm long Appendix found severely congested, its lumen reduced to one fourth its normal size at the cecal end The distal end somewhat club shaped, contained four fecal concretions The mucous membrane of the appendix was ulcerated The appendix was universally adherent, the adhesions being soft and due to the recent attack Appendix removed, stump buried with purse string suture Abdominal wound closed The patient recovered normally, leaving the hospital three weeks after the date of operation

No 8757—Master Herman M, 5 years of age, operated on March 1, 1901, gave the following history At 3 years of age he had measles and scarlet fever In August, 1900, he was sick for several weeks with pyrexia and pain in the region of the umbilicus Fairly well after this until two weeks ago patient had a slight attack of diphtheria, antitoxin was immediately administered and child became well in a few days One day before admission, patient was dull, sleepy and feverish That night he vomited some Magnesia was given, this was followed by colicky pain in abdomen Pain in region of umbilicus persisted

Feb 19, 1901 Since admission temperature has ranged from 100 to 104 F Patient has had the appearance of being extremely ill

Present Condition Considerably emaciated Sordes of teeth Teeth badly decayed Tongue slightly coated Quite hungry Temperature 102 pulse 130 regular and strong Heart and lungs and kidneys normal Complains of pain in region of umbilicus Some tenderness there and in right inguinal region Spleen not enlarged

Treatment Exclusive rectal alimentation for three weeks McBurney's incision 5 cm long Appendix found bent by two bands of adhesions Appendix congested and filled with dark, bloody fluid Appendix removed in usual manner and stump buried with purse string suture Wound closed Patient recovered normally, leaving the hospital March 29, 1901

No 8767—Mr Andrew B a laborer, 36 years of age, admitted Feb 19, 1901, gave the following history At 13 he suffered from an attack of diphtheria otherwise he has been well, with the exception of having occasional slight stomach disturbances In December, 1900 he had pain in lumbar region, which patient thought was rheumatism He stopped work for a few days On Jan 23 1901, he began to feel ill, an hour later had a chill followed by vomiting and abdominal distention Diffuse abdominal pains January 28 pain became localized in right inguinal region and on the 29th he had marked pyrexia Confined to bed about two weeks, since then quite well except some soreness in right inguinal region

Present Condition Fairly well nourished, 30 pounds under weight tongue slightly coated appetite good, but if he takes nourishment there is an increase in the pain and gaseous distention and patient experiences nausea Patient has the appearance of being very ill, although he has been out of bed and able to walk about a little Heart and lungs normal Abdominal wall thick Considerable resistance and marked tenderness in right inguinal region Considerable gaseous distention

Treatment Patient placed on rectal alimentation for three days, mainly for the purpose of overcoming the gaseous distention previous to performing the operation Operation February 22 McBurney's incision which was lengthened by extending incision along outer border of rectus abdominis Appendix found adherent in a mass and perforated 3 cm from cecum Appendix loosened from adhesions and removed Stump buried with purse string suture Primary incision closed Counteropening made opposite anterior superior spine and glass tube and gauze drainage inserted Wet dressings Patient recovered normally and left the hospital April 8 1901

No 8836—Mr Chas A an engineer, 33 years of age ad

mitted March 5, 1901 gave the following history He had experienced the diseases of childhood, otherwise he had been quite well Twelve days ago was taken with a diffuse pain in abdomen, not very severe, able to be about, no vomiting or constipation, but nausea Ten days ago was taken with severe pain, colicky, all over abdomen, severe nausea, but no vomiting About one day later, pain localized in right inguinal region Improved slowly under treatment with exclusive rectal alimentation and four days ago was able to be up Two days ago pain recurred after eating a little, whereupon nourishment by mouth was again prohibited for five days,

Present Condition Fairly well nourished tongue thickly coated Temperature 98 3 pulse regular and strong Heart and lungs normal Considerable resistance and tenderness in right inguinal region

Operation March 8 1901 McBurney's incision The appendix was found adherent to the lower end of the cecum and the anterior surface of the iliacus muscle and surrounded by the omentum It was bent upon itself in the form of an interrogation point club shaped at its distal end and perforated near its end and surrounded by a slight amount of pus Appendix removed, wound drained Patient recovered normally, leaving the hospital April 12 1901

No 8872—Maurice R, 13 years of age, school boy, entered hospital March 13 1901 giving the following history The family history is good with the exception that father has suffered from an attack of appendicitis one sister was operated for recurrent non perforative appendicitis and one brother for acute perforative appendicitis complicated with diffuse peritonitis The patient has always been well with the exception of having an attack of typhoid fever two years ago and one year ago had a severe pain in right inguinal region with slight pyrexia Pain severe for about two days, since then has not felt very well having a constant grumbling pain in right side About twenty four hours ago was seized with a sudden pain in right side Pain very severe up to present time Being under the direct care of his sister, who had experienced severe attacks of recurrent appendicitis, feeding by mouth was at once prohibited

Present Condition Fairly well nourished general condition good Considerable rigidity and tenderness in right inguinal region

Treatment McBurney's incision Proximal end of appendix constricted, distal end enlarged curved on itself in the shape of a question mark Surface covered with lymph Removed, stump buried, wound closed The end of the appendix contained a hard fecal concretion and pus The mucous membrane was ulcerated and the end of the appendix appeared as though it were about to perforate The appendix was surrounded by the omentum which had already become attached by a fine layer of plastic lymph, completely separating the infected organ from the remaining portions of the peritoneal cavity The patient recovered normally and was discharged from the hospital April 2 1901

This case is interesting especially because it shows how early after the beginning of an attack the general peritoneal cavity will be protected against infection

No 8879—Miss Hanna J, a housemaid, 26 years of age came under my care March 14 1901, giving the following history Two brothers and father had stomach trouble otherwise family history was good She had had the ordinary children's diseases, otherwise well Began to menstruate at 14 regular and painless For several years patient has complained of bilious attacks coming one to four times a year During these attacks she was taken with fever vomiting and some pain in epigastrium lasting from one to three days, leaving a soreness in epigastrium About one year ago patient had a more severe attack than usual Patient was taken with vomiting, pain, pyrexia and pain in epigastrium which radiated to right inguinal region, leaving a soreness there The attack lasted three days October, 1900 had a similar attack, but not so severe Eight weeks ago, patient was taken with pain in stomach about five hours later began to vomit the pain becoming more severe A few hours later radiated to right inguinal region No pyrexia This lasted about three days, then patient got up and was around for four days when she began to feel badly again but was not compelled to go to bed for three days after this, when she was confined to bed for two weeks with pyrexia Was given no food by mouth for ten days Pain and soreness in right inguinal region She said she could feel a mass in right inguinal region the size of a goose egg

Present Condition Well nourished, slight coat on tongue, appetite good, bowels regular, temperature 99, pulse 62, regular and strong Heart and lungs normal, abdomen not distended, no abdominal dullness on palpation, slight tenderness and resistance in right inguinal region

Operation March 15, incision through right rectus abdominis muscle 19 cm long Appendix perforated and universally adherent Appendix removed and wound closed Recovery normal, patient discharged from hospital April 9

No 8896—Mr Oscar L, a factory worker, 21 years of age, came under my care March 18, and gave the following history He had had measles as a child, and at 12 had some trouble with left hip which confined patient to bed for thirteen weeks March 21, 1901 nine days ago, had slight diffuse pain in abdomen for two hours, after that felt perfectly well until five days ago when supper did not taste very well and at 10 p m that night began to have slight pain in abdomen, then severe vomiting, then pain became very severe, more pronounced in right inguinal region Vomited all first night and following morning after taking coffee Since then has had nothing by mouth Vomited only once but is still nauseated Temperature 103 F, pulse 110 per minute

Present Condition Well nourished, but has appearance of being extremely sick Tongue thickly coated, face flushed, quite thirsty Heart and lungs normal Abdomen considerably distended considerable tenderness, more pronounced in left inguinal region No dullness quite tympanitic

Exclusive rectal alimentation for four days After the second day the temperature and pulse were nearly normal and at the end of the fourth day his general condition was so much improved that it seemed likely that he was suffering from a catarrhal instead of a perforative appendicitis hence I consented to operate instead of continuing the treatment

Operation March 22, McBurney's incision Peritoneum and intestines inflamed General peritoneal cavity packed away with a large pad Cecum and appendix loosened and a large abscess opened into This sponged out, and perforated appendix containing a large fecal stone removed subperitoneally, clamped ligated removed not covered in by purse string suture, as cecum could not be brought up Glass and iodoform gauze drainage Wet dressings

The patient died on the fifth day after the operation from diffuse peritonitis

There is no doubt in my mind but what this patient would have recovered fully had his operation been postponed for a few weeks When he entered the hospital his condition was so serious that it seemed certain that he would die were he operated upon at once His general appearance was exceedingly bad His abdomen was greatly distended with gas and exceedingly tense His condition improved so rapidly after applying gastric lavage and prohibiting all oral feeding that it seemed likely that our first diagnosis of perforative appendicitis must be wrong Hence too early operation with disastrous result.

No 8963—Mr Alex S a boy 16 years old, admitted April 1, 1901, gave the following history He had had children's diseases, otherwise he had been well until four years ago when he had typhoid fever Shortly after convalescence he took a severe cold followed by pneumonia, then by empyema on right side He has had two operations for empyema Has been perfectly well except slight discharge from sinus on right side of chest, until two weeks ago At this time patient's stomach troubled him a little Six days ago in the evening after eating heartily he was taken with pain and vomiting (pain in epigastrium) Pain continued during night and then felt fairly well for next two days Two days ago ate a hearty dinner four hours later was taken with severe pain over lower portion of abdomen then followed a few hours later by vomiting which was extremely violent The abdomen became greatly distended

with gas and patient was in a condition of severe shock The pain at this time was diffuse and it was not possible to determine the cause of the intestinal obstruction positively Gastric lavage and exclusive rectal alimentation were employed These symptoms persisted about thirty six hours, for past twelve hours has had no pain

Present Condition Fairly well nourished, hungry, bowels constipated, tongue coated Pulse 104, regular and strong, temperature 99 Nothing abnormal on percussion of abdomen Slight tenderness in median line about two inches below umbilicus

Treatment Exclusive rectal alimentation was employed for two weeks Operation April 17, 1901 Incision through right rectus abdominis muscle 8 cm long Peritoneum found studded with tubercles and intestines adherent The appendix and cecum are in a mass of tubercular tissue to such an extent that it was not possible to remove the appendix without leaving large raw surfaces Consequently none of the tissues were disturbed The free peritoneal fluid was sponged away and the abdominal cavity closed In these cases our results have been very satisfactory whenever we have simply closed the abdominal cavity while they have been the reverse whenever we have removed portions in cases in which it was not possible to cover the raw surfaces thus produced The patient made a normal recovery leaving the hospital May 17

No 8984—Mr Andrew G 36 years old, laborer came under my care April 7 1901, giving the following history Family history good Was healthy during childhood, had diphtheria at age of 18, inflammatory rheumatism at 28 for a period of three months had a recurrence at 31 for one month Eighteen months ago had a varicocele operation Nine days ago he noticed a diffuse abdominal pain, which came on slowly and continued for six days being less severe at night, especially if the patient lay on his right side It became localized in the region of McBurney's point Two days ago, after taking a cathartic the pain increased greatly and nausea and vomiting occurred and the patient became seriously ill indicating the diagnosis of perforative appendicitis Feeding by mouth was at once prohibited and the patient began to improve at once The nausea and vomiting disappeared, the abdominal walls became less tense, gaseous distention decreased and his general appearance improved

Present Condition Well nourished, patient feels hungry, tongue is coated, flatus is expelled temperature and pulse are normal, heart and lungs and kidneys are normal The abdomen is asymmetrical In the right inguinal region there is a mass the size of a hen's egg which is firm and tender upon pressure Result of varicocele operation perfect The improvement in the condition is attributed to the fact that no food has been given for two days The patient was placed on exclusive rectal alimentation for eleven days In the meantime the induration has decreased so that now it is only the size of a walnut and not tender In every way the patient's condition is good

Operation April 18, incision five inches in length through outer border of right rectus abdominis muscle Cecum and ileum adherent to omentum Appendix adherent behind cecum, perforated in a small abscess cavity containing a dram of pus Appendix very brittle breaking several times during manipulations Abscess cavity sponged out and drained Wound closed Patient recovered normally Left hospital May 19

No 9000—Mr L C H teamster, 19 years of age, came to the hospital April 9 1901 He gave the following history He had always been well On April 7 he was taken with frontal headache slept fairly well that night, but awoke feeling worse and began to have a diffuse abdominal pain After taking some medicine began to vomit and could not get bowels to move Vomiting persisted until all mouth feeding was stopped the following day Pain persisted and became localized in right inguinal region on second day Bowels moved with simple enema on the 10th

Present Condition Patient appears and feels very ill, face anxious but flushed Well nourished tongue coated hungry, and especially thirsty Heart and lungs normal Abdominal muscles held rather tense a little more so in right lower quadrant Tenderness at McBurney's point, abdomen distended with gas Temperature 101 F, pulse 90 Patient was placed on exclusive rectal alimentation for six days His condition improved from day to day, all the serious symptoms disappearing by the end of the third day

Operation May 15, incision through right rectus muscle 10 cm long Appendix severely congested, shortly bent and constricted at its cecal end, tied down in a bed of adhesions its entire length to posterior surface of cecum Mesenteric glands enlarged, the largest the size of a bean Appendix removed by separating base first and then dissecting towards apex of appendix Apex of appendix extended up behind the gall bladder Wound closed Appendix contained ulcerated areas of the mucous membrane, a fibrous constriction near the cecal end, and its lumen contained pus and fecal material Patient recovered normally, leaving hospital on May 13 1901

No 9002—Mr Simon Q an iron worker, 40 years of age, came under my care April 10 1901 He gave the following history One brother died of carcinoma of the stomach and mother of asthma He has twelve brothers and sisters and father, living and well From four to six he was troubled with some infection of neck Between 14 and 19 he was troubled with dyspepsia Four weeks ago was taken with severe pain in region of umbilicus, vomiting and chill Ingestion of food or water aggravated vomiting, pain became more diffuse but patient continued to work until two weeks ago, when he became too weak to work About this time pain became localized in right inguinal region, pain and vomiting persisted

Present Condition Somewhat emaciated, tongue thickly coated, dentine on every tooth exposed Appetite poor, bowels constipated, heart and lungs normal Abdomen considerably distended, but soft No abdominal tenderness, temperature 99 F, pulse 62, regular and strong No history of jaundice or vomiting before this attack Has been constipated for years Patient placed on exclusive alimentation for five days Gastric lavage employed Nausea and vomiting subsided and gaseous distention disappeared April 14, patient's general appearance has improved greatly Abdomen scaphoid Tympany has subsided almost completely Some tenderness under left costal arch, where there is a slight swelling, which moves downward on inspiration Has had bleeding from hemorrhoids for several years A few hemorrhoids, otherwise rectal examination negative

Operation April 15, incision through right rectus muscle Appendix severely congested, is the result of acute inflammation, club shaped and adherent, constricted at cecal end, contains gas, fecal material and mucus Its mucous lining is obliterated An apparent old tear in serous covering of cecum sutured Appendix removed in usual manner A carcinoma, size of goose egg, involving transverse colon, just to right of splenic flexure The lymphatic glands in the mesentery are secondarily involved Adherent small intestines loosened and tear sutured by silk Lembert sutures An anastomosis with needle and thread made between sigmoid flexure and transverse colon 7 cm long Wound closed Patient recovered normally Left hospital May 15

These histories comprise all of the cases of acute perforative appendicitis I have operated in the Augustana Hospital during the past four months There is but one death among them, and that must be credited to a lack of judgment The histories, although necessarily much abbreviated, give a clear idea of the progress of the disease in such cases whenever this form of treatment is employed I am positive that the mortality would have been at least four times as great had all these patients been operated at once, upon admission There are three cases which do not properly belong in this group, because perforation had not actually taken place but I am confident that this was only prevented by the treatment Moreover each one of these cases had quite advanced peritonitis at the time of admission which would undoubtedly have progressed rapidly had not peristalsis

been inhibited In each of these cases the attack was exceedingly violent until this form of treatment was instituted but subsided very promptly after commencement of this treatment

CONCLUSIONS

As a result of my clinical observations I am prepared to formulate the following conclusions

1 Peristaltic motion of the small intestines is the chief means of carrying the infection from the perforated or gangrenous appendix to the other portions of the peritoneum, *changing a circumscribed into a general peritonitis*

2 This can be prevented by prohibiting the use of every kind of food and cathartics by mouth, and by employing gastric lavage in every case in which there are remnants of food in the stomach or in the intestines above the ileo-cecal valve, as indicated by the presence of nausea or vomiting or meteorism

3 The patient can be supported by the use of concentrated predigested food administered as enemata not oftener than once in four hours and not in larger quantities than four ounces at a time

4 This form of treatment, when instituted early will change the most violent and dangerous form of acute perforative or gangrenous appendicitis into a comparatively *mild and harmless form*

5 Cases of perforative or gangrenous appendicitis, with beginning general peritonitis, can usually be carried through the acute attack safely with this method

6 In all cases of this class gastric lavage should be practiced in order to prevent the absorption of decomposing material from the alimentary canal

7 In cases of doubtful diagnosis this form of treatment should always be employed

8 This treatment will prevent a large proportion of the most troublesome complications and sequelæ of appendicitis, such as ventral hernia, *fecal fistulæ*, extensive adhesions, etc

9 The patient should be permitted to recover fully from his acute attack before an operation is performed except in cases encountered within the first thirty-six hours after the beginning of an attack or in case of the formation of a superficial circumscribed abscess

10 It often requires but a small amount of any kind of food to change a harmless circumscribed into a dangerous diffuse peritonitis

11 The treatment does not protect the patient against a subsequent attack

12 It does not contraindicate the removal of a diseased appendix before the septic material has extended beyond this organ

13 It is indicated in all intra-abdominal conditions in which it is desirable to prevent the distribution of septic material by means of peristaltic motion

14 The laity should be taught to stop feeding and giving cathartics to patients suffering from intra-abdominal diseases

710 Sedgwick Street, Chicago

Rhus Toxicodendron Poisoning—This is the season of the year when all physicians resident in a large area of the United States are interested in a remedy of utility in case of rhus toxicodendron poisoning, when a patient presents himself with the usual symptoms of ivy or oak poisoning which are nearly all visible to the naked eye Dr R S Patterson, of Oakdale, Pa uses glyco phenique and aqua, equal parts, apply on lint without stint If the case is a little chronic or two or three days old use glyco phenique and olive oil, equal parts, locally Neither of the above combinations of glyco phenique will remove the stain of rhus tox from the patient's clothing, but the tumefaction will fade out under its influence in a few hours

SECTION ON OBSTETRICS AND DISEASES OF WOMEN

ADDRESS OF CHAIRMAN DELIVERED AT THE FIFTY SECOND ANNUAL MEETING OF THE A M A, HELD AT ST PAUL, MINN, JUNE 4 7, 1901

HENRY P NEWMAN, A M, M D
CHICAGO

Members of the Section and Guests I am deeply sensible of the honor of the responsibility you have conferred upon me in selecting me to preside over the session of a body such as this, and in thanking you most sincerely, I wish also to thank you for having selected an aid so proficient as our secretary, Dr Bonifield Largely to his efforts is due a program which would do credit to any association of specialists in the world of medicine, and in spite of the fact that the work of your secretary is particularly difficult Since we have no organization as a Section, and no connected existence beyond these annual meetings, there is lacking the stimulus of historical association Beyond the papers and other scientific contributions which are read in session and then published only in part and scatteringly in THE JOURNAL, the record of our proceedings is lost from year to year, and there is no continuous and organic relation such as there should be between the periods of our work This, it seems to your chairman, is where lies greatest need for improvement, and my suggestion to this meeting would be that permanent organization be effected, that a permanent secretary be appointed who shall keep the minutes of meetings and attend to the publishing in a suitable volume of the entire proceedings, including papers

With the growth of the Association it has become necessary, or at least expedient, to propose a reorganization of the work of the general body, thus saving to the members the *valuable time now consumed in the general* meeting

The establishment of the proposed House of Delegates will give opportunity for a closer and more permanent organization of the different Sections and will result, I am convinced, in more efficient work As the list of papers and participants shows, this gathering of gynecologists and obstetricians has assumed proportions and an importance second to none in existence and worthy of more thorough and reliable organization than the haphazard annual method now in vogue

SCIENTIFIC PROGRESS

In calling your attention to the year's progress in gynecology and obstetrics, as required by the By-Laws of the Association, it is only necessary to mention briefly such events as seem to have the most direct relation to the growth and development of this branch of science, leaving it to time and your good judgment to determine their value

ANESTHESIA BY LUMBAR PUNCTURE

Among the most noteworthy and widely discussed of such events is the clinical adoption by some of our leading authorities of the method known as cocainization by lumbar puncture

Testimony as to its usefulness is of the most conflicting nature The procedure originated with Dr Leonard Corning, of New York, who proposed it as long ago as 1885, but did not practice it except in laboratory experiment Bier, of Germany made the first injection into the cephalo-rachidian liquid Tuffier next became a supporter of the method and, after one or two former papers, has just brought out a most favorable report

covering 400 cases He reviews carefully the literature of the subject and subjects the reported mortality, 6 in 2000 to severe analytical criticism He claims that in no case could death be properly attributed to the injection He is just as positive that there is no danger of permanent nervous affections following the operation Reclus, of France however is a vigorous and logical opponent and makes statistics put a discouraging aspect upon the experiments so far conducted

Our own writers seem to agree in preferring general anesthesia by chloroform or ether, except where for any reason these are positively contraindicated and a substitute must be found The limits of this operation are therefore, somewhat restricted, and it will probably never be as popular on this side of the Atlantic as with our foreign colleagues

Tuffier claims that with a perfect technique and practical operator there would be no failures and no danger, but it is being recognized more clearly every day that in such a proceeding the patient plays a very important part Already it has been conceded quite generally that it is not applicable to children or to extremely sensitive adults particularly women, or where major pelvic or abdominal operations are required

It would appear that perfect consciousness even with freedom from pain, is not an advantage to the patient and it is easy to understand the unpleasant impression described by Morris Richardson on seeing women, in a foreign clinic pallid ghastly and with every evidence of profound mental and physical shock, consciously undergoing major operations upon their own viscera and witnessing all the details of the occurrence In obstetrical operations the method has been found unreliable on account of the difficulty of timing the anesthesia to correspond with the moment of greatest necessity several injections being sometimes required There is no relaxation of muscular tissue as in chloroform and ether narcosis, and its use seems rather to retard than hasten the delivery For the latter reason the method is contraindicated in operations which demand such relaxation and in difficult laparotomies

It is probable that before you listen to another report from this chair the position and limitations of lumbar anesthesia will be definitely fixed

PROTOZOON OF CANCER

If the experiments of Gaylord, of Buffalo, prove that the organism which he has successfully isolated and reproduced by culture inoculation is the protozoic parasite of cancer our conception of the dread disease and our established therapy will need to be reconstructed If these parasites invade the general circulation quite early in the disease a proposition now occupying the attention of Dr Gaylord and his associates, it would, on hasty observation, seem futile to attempt to cure by the knife There remains however, so much laboratory and clinical work yet to be done before the exact relation between the parasite recognized in the circulation and the local manifestation of the disease that it is yet too early to acknowledge discouragement with methods so far the best at our command and to which many a sufferer apparently owes health or positive amelioration These findings if indisputably established should only stimulate us to greater zeal in palliative efforts and in the endeavor to recognize and eliminate the local nidus before the period of circulatory contamination And until a specific shall be discovered to destroy the parasite itself the new theory of the disease will not prevent surgical interference up to the eleventh hour of the patient's need It should, however, substitute enthusiasm in early diagnosis for that of late radical surgery, and would militate against the employment of two extreme methods In the early recognition of suggestive symptoms by the patient, and of the first pathological changes by the physician, are we to find our most certain relief The rapid increase of uterine cancer as certified to the best authorities, can according to our present knowledge, only be curtailed by early correction of all lesions of epithelial surfaces about cervical, urethral, vaginal and rectal orifices In the cervical area we have most simple and effectual means of eradicating such danger points When the indications exist, "trachelo-plasty contemplates and accomplishes the entire removal of the cancer-bearing tissue, if we may speak as we do of "pile-bearing areas"

The presence of submucous or cervical fibroids subject to continual irritation is, directly or indirectly, a menace, and calls for ablation

REMOVAL OF LYMPHATICS

In reference to the attempted removal of the whole lymphatic system of the pelvis as advised by Ries, Clark, Prior Werder and Bovee in our own country, and by Rumpf, Chalot, Wertheim and Freund abroad, Jordan, of Heidelberg, at the Thirtieth Congress of the German Surgical Society, stated his belief that the glands become affected only at a late stage and in rare cases, that it is impossible to remove them all, and that partial removal has no object He recommends the vaginal route in removal of the cancerous uterus, and the employment of Schuchardt's para-vaginal incision Olshausen, of Berlin, agrees with Jordan, and considers only such cases operable in which the cancer has not gone beyond the boundaries of the uterus He does not think Schuchardt's incision called for in more than three quarters per cent of all cases, and considers the abdominal route admissible only in cases where the vaginal is technically impossible Martin, of Greifswald holds the same opinion as Jordan while Wertheim, of Vienna takes the opposite view He prefers always the abdominal route, and removes the connective tissue surrounding the uterus and the lymphatic glands, having found them affected in 36 per cent of early cases

OVARIAN TRANSPLANTATION

The past year has done much to establish the operation of ovarian grafting or transplantation as a logical procedure and one worthy of careful and conscientious experiment The honor of the original idea is given abroad to Knauer, of Germany whose first publication was dated in May, 1896 As R T Morris, of New York had already published in October, 1895, the results of his first experiments, we may be pardoned for laying claim to a division of priority for our American confrere As the work of Knauer had continued for a year before his results were given out, it would be profitable to take cognizance of his early experiments To recall briefly the end in view, the technique followed and the results obtained, we have the following The object of Knauer was to ascertain if, in animals ovaries extirpated and then transplanted in any other portion of the peritoneal cavity were still capable of living and functionating normally that is to form and expel regularly fructifiable o a His experiments consisted in removing under strict asepsis the two ovaries of certain rabbits and then grafting them in some other part of the peritoneal cavity Most often the organ was placed in a sort of pocket created in the serous membrane in the neighborhood of the tubes and where the organ

only partly buried, kept a portion of its surface free in the peritoneal cavity The results were such as to warrant the author in affirming that in the rabbit ovaries can be transplanted into any region whatever of the peritoneal cavity and that they will continue not only to live, but to functionate, that is, to produce ova and carry them to maturity These conclusions were confirmed and extended by Gregorieff who, out of twelve rabbits submitted to ovarian grafting, succeeded in fecundating four Morris has gone still further, having extirpated the diseased ovaries of a patient, he took a healthy portion of one of the glands and grafted it in the vicinity of one of the tubes One month after leaving the hospital the woman became pregnant, but aborted unfortunately, at three months The possibility of pregnancy after transplantation of the ovary was thus demonstrated It remained only to prove that gestation could proceed normally and result in accouchement at term This proof has been furnished by Knauer On Sept 8, 1896, he practiced transplantation of ovary in a rabbit in the manner before described He opened the animal thirteen months afterwards to observe the state of the glands One was completely atrophied but the other had preserved its normal volume and aspect and contained three follicles almost at maturity The abdomen was closed and two months afterward the animal was put to the male On Jan 3 1898, she gave birth to young, a male and a female, perfectly developed

A Palmer Dudley reported at the Amsterdam meeting of the International Congress of Obstetricians and Gynecologists a striking case of transplantation of the ovary into the cavity of the uterus, and the Italian Marchese bases the following conclusions upon eight experiments upon dogs followed by autopsies and microscopic examinations 1 Transplantation of the ovary is possible in animals 2 It is always preferable to abandon the ovary in a free cavity or near lax tissue rather than where the tissues are muscular or robust 3 One should prefer the grafting of an entire ovary to that of simple fragments 4 The ovary should be furnished with a small pedicle from the neighboring tissues, which will serve to fix it in its new position 5 If all the conditions are realized one can be sure that even in an abnormal situation the ovary will continue to functionate

Mauclaire concludes that the experiments so far conducted prove that auto- and hetero-grafting will be successful if properly performed and the ovary is aseptic Such grafts should result in modifying menstrual troubles and those consecutive to ovariotomy In his opinion it is advisable to make such grafts even after the menopause with the object of conserving the internal secretion of the ovaries which, according to the physiologists is not lost with the external secretion

TUBAL EPITHELIUM

Mention should be made of the exhaustive work of M Voinot of the faculty of Nancy, who has studied the modifications of the tubal epithelium during the entire life of the woman Studying the tube first before and after the period of genital activity, he has seen that during these two phases of life, contrary to that which has generally been accepted there are ciliated cellules on the epithelium constant before puberty quite eventual after the menopause Before puberty these ciliated cellules are encountered for the most part at the pavilion, [illegible] in the ampulla and in the isthmus very exceptional in the interstitial portion After the meno[illegible] only in the ampulla that they can be found At a very advanced age they disappear even in situations where the epithelium remains freely cylindrical Both before and after the menopause, the tubal epithelium presents great irregularities, but the irregularity is not the same in both cases Before puberty it affects principally the constitution of the cellular protoplasm and nucleus After the menopause the irregularity is observable principally in the form and elevation of the cellules The characteristics of tubal epithelium during genital life is the presence of curiously repeated groups of ciliated and non-ciliated cellules At the pavilion and the interstitial portion the cellules are almost all ciliated In the ampulla and isthmus they are ciliated

LeCount, in his study of the genesis of carcinoma of the Fallopian tube in hyperplastic salpingitis, has shown that gynecologists have taken but little cognizance of an inflammation of the lining of the tube associated with polyp-like or villous growths such as occur on other mucous membranes He cites nine cases of hyperplastic salpingitis that have been variously reported as examples of carcinoma or papilloma of the tube Five of the twenty-two cases of carcinoma gathered from the literature were removed during the transition that occurs between this form of salpingitis and carcinoma His study of the subject resulted from the examination of a tubal carcinoma removed by Newman, of Chicago, which is the third so far reported in this country

The value to the gynecologist of researches of this kind can not be overestimated in connection with his study of the important lesions to which these organs are subject

PERMEABILITY OF THE AMNION

The permeability of the amnion has been demonstrated by the experiments of Moissency upon female guinea-pigs

His conclusions coincide with those of Bar that the amnion is "not a closed sac which receives always and gives out nothing," that the internal membrane of the amnion is permeable and under certain conditions permits the passage to the mother of soluble substances contained in or injected into the amniotic fluid The degree of permeability varies with the different periods of gestation, the rapidity of passage depending principally upon the epoch of fetal development, being slower as gestation advances, appearing very difficult near term

A weak solution of cazluenoe red, 1 in 3 to 2 in 3 cubic centimeters was employed in the experiments

PARAFFIN INJECTIONS

In further experimental research, we have the report of Geisung on his work with injections of paraffin for incontinence of urine due to traumatism He succeeded in accomplishing the desired result by forming a valve whose rigid walls consisted of tissue impregnated with paraffin A second injection was necessary but three months later the patient treated was able to hold her urine five to six hours when active ten hours when recumbent Meyer acting upon Geisung's claim that paraffin could be injected subcutaneously, would remain permanently, cause no reaction nor be absorbed, injected animals with various quantities, and found that a considerable portion was removed by absorption and could be found in the lymph glands In one animal 20 per cent of injected mass was lost after four weeks, and in another 50 per cent after eight weeks Halban has recently used the same medium in four cases of cystocele with satisfactory results He injected the paraffin between the walls of the vagina and the bladder then in-

seited a pessary for twenty-four hours so as to allow the mass to harden in the proper position

CESAREAN SECTION

Cesarean section for placenta previa is advocated by A P Dudley on the ground that it offers a method of saving two lives in place of risking one or both and is practically free from danger if certain conditions are fulfilled These are that an antepartum diagnosis shall have been made, and the operation done under aseptic conditions before the patient has become exhausted The conservative Cesarean operation becomes more popular as perfection of technique and asepsis daily lessens the dangers of the procedure in comparison with other elective operations which endanger the child Its limitations are broadening until we see its employment in placenta previa and in eclampsia as well as for the older indications Hillman gives a favorable review of the history of Cesarean section for eclampsia He adds one case in his own practice to 40 others already reported and finds that 19 mothers and 17 children have been saved by this method Knapp, of Prague, tabulates 19 cases of his own, 4 fatal treated by other than section

The frequency of eclampsia is about 5 to 1000, 41 cases with 6 deaths gives a maternal mortality of 14 6 per cent. Child mortality is 31 8 per cent Knapp agrees with Duhrssen that Cesarean section is contraindicated in eclampsia, the mortality from this operation being too high

According to Cestan and Peyran, to operate quickly, simply and cleanly is the most certain method of preventing hemorrhage, shock and infection the three dangers possible in Cesarean section

In this connection, Alain of the faculty of Bordeaux, predicts the disappearance of feticide as a therapeutic measure

ENTEROPTOSIS

Glenard of Lyons, who, in May, 1886, published his interesting observations upon neurasthenia and enteroptosis, attributing to prolapse of the intestinal mass a large percentage of the gastric symptoms which are always to be found, marked or veiled, in cases of neurasthenia gave his name to a disease which is of late attracting much attention Glenard stated his belief that neurasthenia is most often the syndrome of enteroptosis and that there should be opened in nosology a special chapter on the subject in which shall enter as varieties of the disease the different splanchnoptoses such as floating kidney movable liver and spleen, dilatation and descent of the stomach This chapter is now being written by the work of Dock, of Ann Arbor, Illoway, A K Stone J J Putnam and others

Formerly what was known as the "vital theory" attributed the cause of this condition to a relaxing of the ligamental supports of the viscera More lately it has been considered due to a lax state of the abdominal walls with decrease of the intra-abdominal pressure

The recent work of Harris calls attention to such physical defects as narrowing of the mid-zone of the body which tend to displace the viscera downward for want of room This may be considered the physical theory In cases where appreciable separation of the recti muscles occurs Webster's operation would seem to promise correction of the anatomical fault Treatment by exercising the abdominal muscles by gymnastics or by means of a specially designed apparatus as recommended by Turck seems not only of value in correcting the anatomical defect but in restoring physiologic conditions

UTERINE FIBROIDS

The subject of uterine fibroids and retro-displacements will be so well presented during the progress of this session according to the promise of our program, that it would be encroaching upon valuable time to add more than that the advancement in the treatment of these common and always interesting affections has been gratifying and that the experience of many years in many methods of treatment for the latter affection have brought the profession to a realization of the value under definite indications of the shortening of round ligaments as proposed by Alquie, Adams and Alexander

It is especially gratifying to your chairman to note this rehabilitation of a proceeding so well adapted to its purpose but so slowly acknowledged, for the reason that he was one of its earliest advocates and in face of its early unpopularity

Our foreign colleagues are growing more enthusiastic as time goes on, and are placing themselves on record with us as supporting it in suitable cases over all other elective operations

Of special value in the treatment of bleeding fibroids, as well as in shock incident to the radical operations for their removal is the popular employment of saline solutions by endemic or colonic injections The necessity for improved methods of hemostasis and the value of conservative surgical interference grow upon us as we recognize the danger of the exsanguinated condition due to hemorrhages at or near the menopause We have outgrown the mischievous theory that because fibroids may atrophy and disappear after the menopause it is safe to leave them to nature even where there is a possibility of such disappearance, the waiting is too hazardous, the hemorrhages themselves often producing such anemic conditions as to imperil the after-health of the patient

Among the improved agents for surgical hemostasis should be mentioned the angiotribe, whose claims for recognition rest upon certain advantages facility of use, greater certainty of hemostasis, more rapid and smooth convalescence, and the avoidance of such objectionable after results as hematoma, granulating and sloughing stumps, adhesions and cicatricial tissues The progress of obstetrical technique and modern asepsis has been so great as practically to eliminate the problem of puerperal infections from consideration except as it is related to adventitious circumstances or to that sociological error, the ignorant midwife Further advancement in this direction must be by way of educating others rather than laboratory research

FUTURE OF GYNECOLOGY

And it is in this aspect of gynecology that its greatest hope for the future lies its place as guardian and educator of the patient rather than simply surgical referee in diseased conditions

Nothing could be more disastrous to the worth and dignity of this specialty, which has occupied for so long so honorable a place in medicine than to allow itself to be considered and spoken of as one of the surgical specialties

We are but just arriving at the threshold of the greatest era in our history in which the full value of prophylaxis is being recognized, and gynecological knowledge and experience are to be the re-creator and conservator of health in women It is quite true that the skill of the competent general surgeon may guide him successfully into the pelvic cavity and out again without any recognition on his part or the part of his patient of lack

or incompetence, but surgery is not all of gynecology It is a very brilliant department of the branch, but relatively unimportant when compared with the wider possibilities of gynecic science

In this day, when the complexity of civilized social life makes such demands upon the physical constitution of the race, the public has come to recognize that the very existence of the species depends upon an improvement of its physical standards Boards of health, public interest and encouragement are helping us on in our national and municipal efforts, but to whom shall be left the intimate and personal problems that pertain to the life of the girl and woman?

Only gynecology can rightly determine the importance of the developmental period and the relation between education, social habits and environment and the diseases from which so many women suffer, can estimate the individual need for functional development and teach women the relative advantages of prevention and cure in pelvic disease

Whatever he may call himself, surgeon or general practitioner, he is a true gynecologist who takes this view of his work and becomes the prophet and propagator of prophylaxis It is itself too broad a specialty to be merged into any other, and along this line it must grow, on the one hand perfecting its knowledge of pathology and etiology and its curative methods and on the other working to eliminate from modern life causes of disease in women

THE OBSTETRICIAN

In this the obstetrician has his part, and it is due to the importance of his work that he be given more time and consideration upon the programs of deliberative bodies such as this An effort has been made by your chairman to give the obstetrical division of this session its due prominence by soliciting papers on practical topics from some of our leaders in the specialty There has been too much neglect of obstetrical science as a specialty, a condition that worked harm both ways upon the innocent patient and upon the physician The belief among the laity that anyone who is graduated from a medical college is competent to conduct a case of obstetrics is still too prevalent The results are often disastrous in the extreme to mother and child and to practitioner because depreciation discourages professional growth Growth there has been in spite of discouragement, as witness, for instance, the advancement of Cesarean section to its rational place in modern obstetrics Its application to placenta previa might seem to the ultra conservative in the light of former practice as a most radical and uncalled-for innovation We must, however, consider that the improved technique in abdominal and pelvic surgery renders what might seem bold and heroic methods safer than the delay and expectant treatment in so dangerous a condition as placenta previa with its estimated mortality of 50 per cent At all events, in view of our modern aseptic and technical advancement, the classical indications for capital obstetrical operations need recasting, bearing always in mind that it is the conservation of life and health in both mother and offspring that is to be sought for in each individual case, remembering also that grave obstetrical operations demand the same environment as other surgical cases In all cases the trained obstetrical nurse should supplant the monthly nurse, in all complicated cases the appointments of the modern hospital should be preferred to the makeshifts of home treatment We should also remember that as we ascend in the scale of civilization we have a more highly organized individual to deal with, usually with greater departure from physiological standards and requiring greater skill and delicacy in management

The connection should be as firmly established between obstetrics and gynecology in fact as in theory, and the benefit will be mutual . With progress in the right direction the former will outlive the latter specialty There will always be need for intelligent obstetrics, while intelligent gynecology should eliminate itself at last by eliminating those conditions which are the cause of disease in women and its only excuse for being Nothing but gynecology can eliminate gynecology

Original Articles

ORAL MANIFESTATIONS AND ALLIED STATES

E S TALBOT M D, D D S
FELLOW OF THE CHICAGO ACADEMY OF MEDICINE
CHICAGO

Scurvy is a disease characterized by simple inflammation of the gums which gradually becomes chronic and deep-seated and extends throughout the alveolar process causing its absorption and exfoliation of the teeth This disease has passed under various designations salivation, bromidism, plumbism, iodism, pyorrhea alveolaris phagadenic pericementis, ptyalism and interstitial gingivitis These terms merely define local manifestations in connection with other symptoms The term interstitial gingivitis defines the precise pathologic change which occurs in the tissues

Pathologic material for the study of scurvy in man is obtained with such difficulty in the recent state as to necessitate research upon animals As the first step in investigation, two practitioners of comparative medicine, with an extensive hospital practice, were consulted as to the frequency of this disease in animals All animals under their care suffered from it more or less, but 80 per cent of dogs over 8 years of age had the disease Nearly every dog in the hospital under their care was so affected These dogs comprised all breeds I found every phase of interstitial gingivitis in the mouths of these dogs from its inception to the loss of the teeth The roots of the teeth of some were covered with deposits and so exposed that the teeth could be removed with the fingers Such badly diseased mouths are rarely, if ever, present in human beings The outer plate of bone was absorbed, the roots entirely exposed, pus was oozing from around them and the mucous membrane was badly inflamed

The mouth of a Scotch terrier is shown in Fig 1 The molar and premolar had been removed with the fingers The cuspids and incisors are quite loose There are large deposits of tartar The gum and alveolar process have been absorbed nearly one-half the length of the roots of the teeth In Fig 2 is seen the mouth of a Boston terrier with the incisors and premolars removed There is extensive pyorrhea There are calcic deposits upon the cuspids and molars There is recession of the gums and alveolar process In it one premolar in the upper and one in the lower jaw have been extracted There is extensive inflammation of the gum about the molar, cuspid and incisor with large calcic deposits about the teeth In Fig 3 are shown teeth covered with calcic deposit the entire length of the root

These teeth were removed by the fingers from the mouths of two dogs, one of whom was later obtained for scientific study This was all the material to be obtained from the hospital, since the dogs were pets and had been placed under treatment by their owners

Other necessary material was obtained from the dog pound Ninety-five per cent were mongrel curs leading a street life, hence neither luxurious diet or care could be charged with any disease in them They have, at least plenty of outdoor exercise and fresh air In a general way it was found that inflammation of the gums, especially about the canine teeth, was almost always present in dogs over one year About 25 per cent of these dogs at 4 years of age had the disease, 80 per cent from 8 to 10 years, 95 per cent over 12 years of age Since I commenced my investigations (four years ago) I have examined quite a large number of dogs about homes, but I have never found a dog over 1 years without this disease to a greater or less extent Many house dogs at one year had inflammation of the gums Dogs for infection and those for mercurialization were picked up in the streets

Most of the dogs exhibited at dog shows are young, ranging from 1 to 4 years of age About 25 per cent would range from 4 to 8 years A casual examination of their mouths revealed interstitial gingivitis Occasionally recession of the gums and pyorrhea alveolaris occurred On a more careful examination 25 per cent of dogs between the ages of 1 and 4 were found to have interstitial gingivitis and 75 per cent of dogs from 4 to 8 years were found to have interstitial gingivitis with recession of the gums and pyorrhea alveolaris In the study of this disease therefore dogs are excellent substitutes, since for pathologic research they can be obtained at any stage of the disease The work was performed under the supervision of Drs Ludwig Hektoen, W A Evans, Maximilian Herzog, Theo A Edwin Klebs, and Dr Robert F Zeit, pathologist

The technique of the examinations of interstitial gingivitis and pyorrhea alveolaris in dogs was as follows After fixing and hardening in 2 per cent formalin, alcohol or Muller's fluid the tissues were decalcified in a 5 per cent alcoholic solution of nitric acid, imbedded in celloidin and stained in various ways, the principal ones being hematoxylin and eosin Out of these slides have been selected a series illustrating the progress of the disease from the beginning to the loosening and exfoliation of the tooth

Fig 4 shows a longitudinal section of a cuspid tooth with the alveolar process *in situ* The epithelial structure (E) is pulled away slightly from the edge of the enamel (A) In this section the infolding of the epithelium is shown at the neck of the tooth This structure passes downward, folds outward and upon itself (AA), and returns two-thirds of the distance toward the gingival border, leaving a pocket (RR) The epithelium (E) is very dense and thick The papillary layer of the submucous tissue (G) is very clearly defined The capillaries (K) can be distinctly traced from the deeper fibrous tissue through the submucous layer into the papillary layer The thick and heavy fibrous tissue of the periosteum ("Dental Ligament," Black) may be seen at H inserted firmly into the cementum and extending outward and downward Just below (AA) may be seen the interlacing of the coarser fibers of the periosteum with the finer fibers of the submucous tissue

Figure 1

Figure 2

Chronic round-cell inflammation may be seen extending from the papillary layer through the capillaries into the interstitial tissue of the submucous and the periosteum Marked inflammation has occurred at V The openings in the folds of the epithelium are fruitful sources for the accumulation of food, epithelial scales and detritus, in which fermentation and decomposition from micro organisms result, producing inflammation

Fig 5 is a section through the peridental membrane

Figure 3

(I) and alveolar process (J) at the lateral incisor The inflammation has extended down from the papillary layer through the submucous tissue of the periosteum into the peridental membrane and into the alveolar process Round-cell inflammation may be seen in the blood-vessels extending through the Haversian canals (L)

Fig 6 is a section of the peridental membrane and

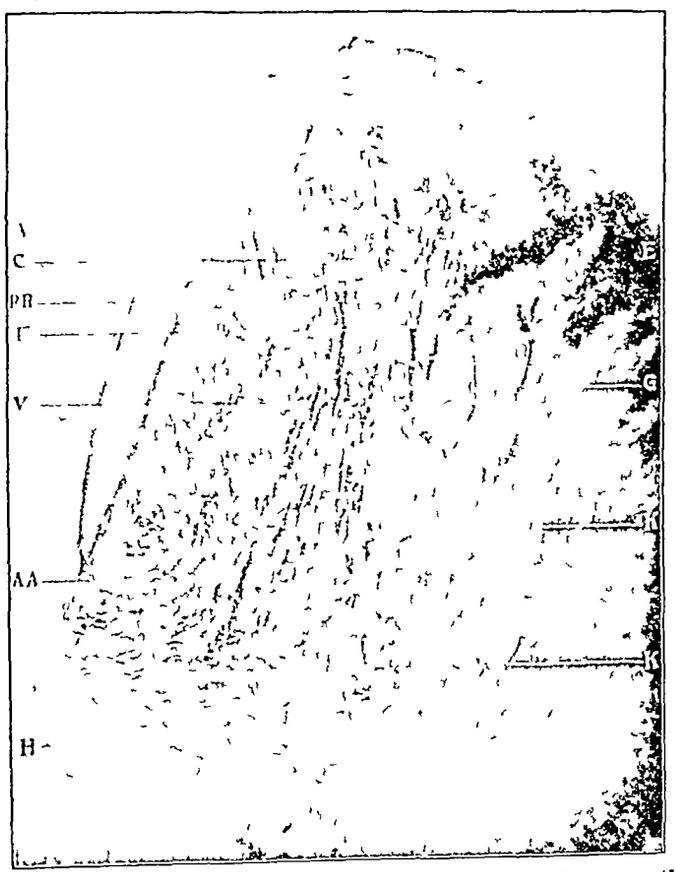

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Fig 4 —Longitudinal Section of Tooth and Gum Tissue Chronic Interstitial Gingivitis Dog —A, Enamel Γ Epithelial tissue G, Submucous membrane H, Periosteum K, Capillaries V, Violent inflammation AA, Point of union of epithelial tissue and peridental membrane RR, Space pocket from want of union of epithelial fold

alveolar process, illustrating the effect of interstitial inflammation upon the blood-vessels and aveolar process Chronic inflammation extends throughout the peridental membrane with very decided inflammatory change (V) The cut ends of the blood-vessels which were originally situated in the Haversian canals are seen at BV They have become involved with the result of a thickening of the walls and endarteritis obliterans The bone about these vessels has been entirely absorbed The inflammation has extended beyond, into and through the Haversian canals, producing the type of absorption of the trabeculæ known as halisteresis ossium Lacunar absorption has also occurred (O) Where decided inflammation (V) has taken place, abscesses are more liable to occur (as will be noticed later), from the large number of blood-vessels at this locality

Fig 7 is a section from another location of the alveolar process with a greater amplification, showing the inflammatory process extending through the alveolar process Endarteritis obliterans may be seen in different localities (EO) Three forms of absorption are evident in this figure Enlarged areas arising from absorption of the trabeculæ (halisteresis ossium) due to the inflammatory process The vessels of Von Ebner precede perforating canal absorption (BB) distributed over the entire field, also the result of the inflammatory process and lacunar absorption (O) which may result from the inflammation As long as the fibrous tissue remains in these large areas to retain the osteoblasts, new bone tissue may be produced under favorable conditions On the other hand, when this tissue and the osteoblasts are destroyed, the alveolar process can not be restored

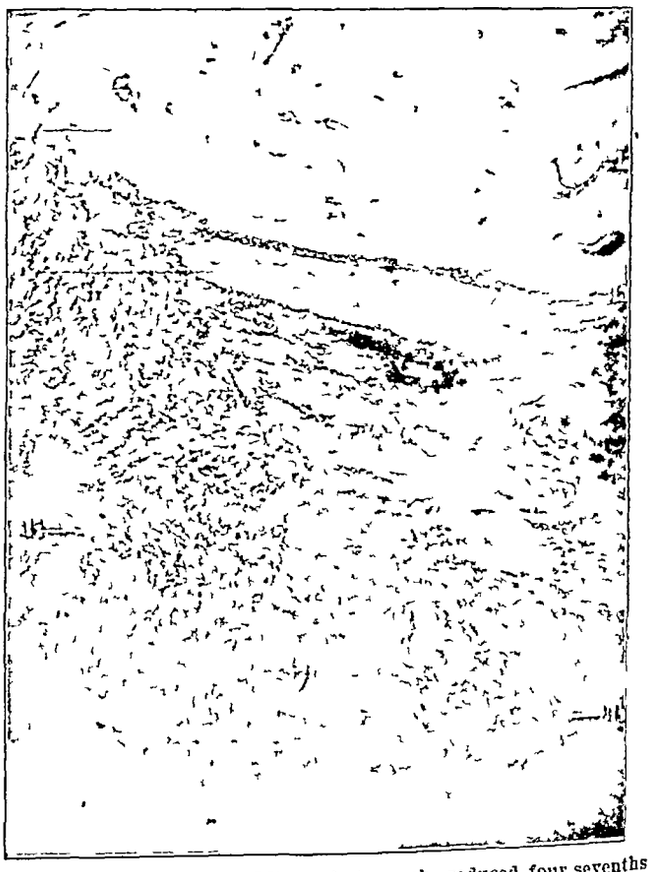

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Fig 5 —Longitudinal Section of Alveolar Process and Peridental Membrane Slight Interstitial Gingivitis Extending into Alveolar Process Dog —J, Alveolar process L¹, Inflammation extending through enlarged Haversian canals I¹, Inflamed peridental membrane

Fig 8 shows a section of the alveolar process from another dog Here lacunar and other absorptions (halisteresis ossium) are well shown Thirty-seven osteoblasts (O) may be counted in the field while destruction of bone by halisteresis (Q) is rapidly going on Remains of Haversian canals with the blood-vessels may be seen (BV, L) In the discussion of the peridental membrane

extending into the alveolar process, particular attention was called to the fact that large bundles of fibers extended into the process in such a manner as almost to isolate portions of bone In the lower left-hand corner (X) may be seen two pieces of the alveolar process entirely separated from each other and the main body of the bone In interstitial gingivitis it is not uncommon to find pieces of the alveolar process separated by halisteresis and lacunar absorption When loose teeth are extracted as a result of this disease, pieces of the alveolar process come away with the peridental membrane attached to the tooth In the upper left hand corner may be seen eight or ten new osteoblasts (O) in an enlarged Haversian canal, at work isolating one piece of the alveolar process from the other

Fig 9 shows a slide from still another dog Halisteresis (Q) and perforating canal (P) absorption are

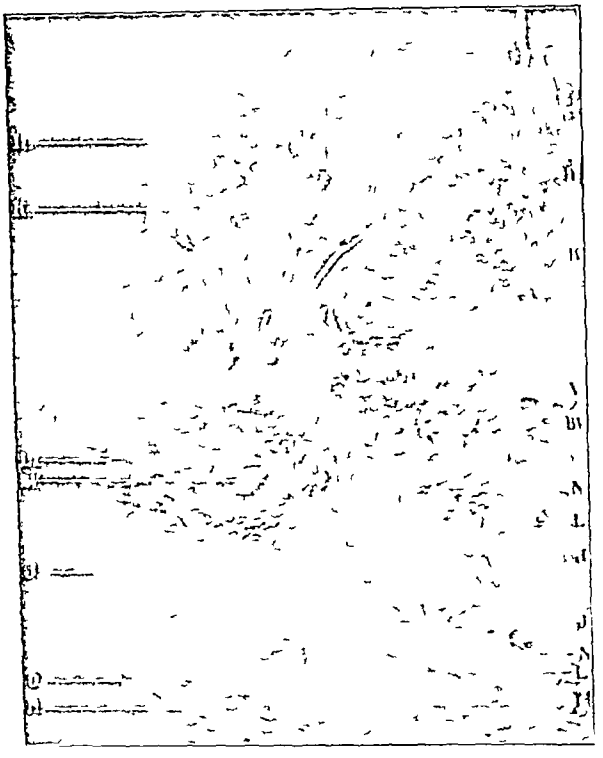

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Fig 6—Longitudinal Section of Tooth, Alveolar Process and Peridental Membrane Violent Round Cell Inflammation of Peri dental Membrane Extending through the Haversian Canals into the Alveolar Process—C Cementum J Alveolar process K Capillaries L Haversian canals N Large spaces arising from absorption of the trabeculæ starting in the Haversian canals (halisteresis) O Lacunar absorption V Violent inflammation BV Blood vessels originally Haversian canals P Inflamed peri dental membrane L' Inflammation extending through enlarged Haversian canals

here well shown In the larger space at the lower left-hand corner may be seen two arteries (EO) which were originally the location of Haversian canals and which have thickened walls and a tendency to obliteration The light color shows decalcification the dark normal bone At P may be seen perforating canal absorption At FG fat globules may be seen while in the larger space at the upper right-hand corner is evident destruction of the fibrous tissue

Fig 10 is a section through the jaw and incisor tooth, showing the relation of the structures to each other in a severe case of interstitial gingivitis and pyorrhea alveolaris The tooth is attached at only a very small portion of the apical end of the root The disease has been of long standing Absorption of the alveolar process on one side has progressed on fully one-half of the root, while upon the other about one-third the distance Inflammation commenced at the gingival border and extended through the periosteum (H), peridental membrane (I) and alveolar process (J) Marked inflammation (V) has occurred in the mucous membrane fold An abscess has formed with a fistula extending to the gingival border The thin border at the left of the fistulous tract is the epithelium layer next to the tooth It is evident that the pus burrowed to the surface through the structure instead of between the epithelium and the tooth A similar abscess and fistulous tract are evident upon the gingival border on the opposite side of the tooth The irritation produced by the movement of the tooth has caused the cementoblasts to deposit large quantities of material upon the sides and the end

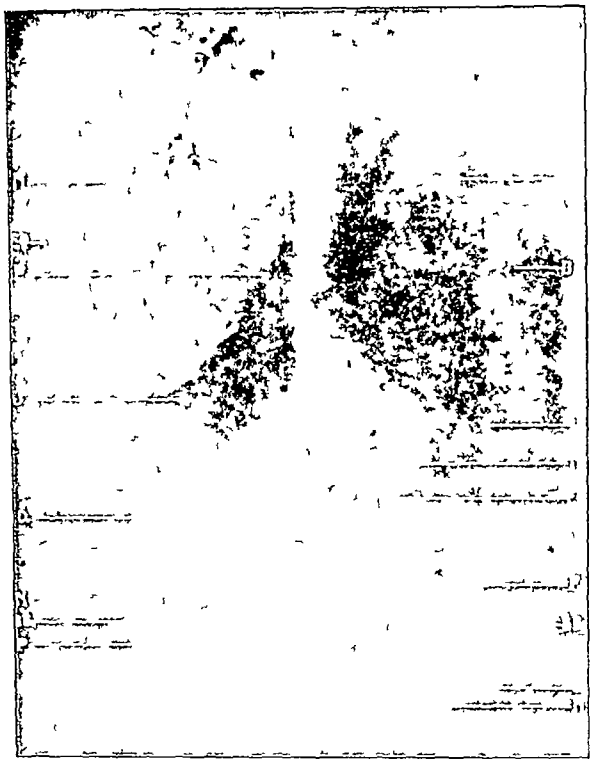

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Fig 7—Longitudinal Section of Alveolar Process Chronic In flammation Extending throughout showing Halisteresis Perforat ing Canal and Lacunar Absorption Dog—J Alveolar process N, Large spaces arising from absorption of the trabeculæ starting in the Haversian canals (halisteresis) O Lacunar absorption P Perforating canal absorption BB Blood vessels of V Ebner pre ceding perforating canals EO Endarteritis obliterans

of the root The main nerve trunks (U) may be seen at and below the end of the root

Fig 11 illustrates the alveolar border on the right side of Fig 10 greatly amplified This shows the process of interstitial gingivitis extending through the alveolar process producing absorption with intense inflammation of the peridental membrane and abscess with fistulous tract

Fig 12 shows a similar process amplified from the left side of Fig 10 It is interesting to note in this illustration that the fibers of the sub-epithelium pass down and become interwoven with the coarser fibers of the periosteum in just the opposite direction from those in the other side of the tooth and in other illustrations The fibers from the mucous membrane along the side of the tooth extend down and into the peridental membrane

without a break in the structure The arrangement of the fibers of the submucous layer in producing the fold is well illustrated in the figure This picture illustrates inflammation starting in the gingival border

To secure a chain of evidence that interstitial gingivitis (due to the metals drugs, uric, lactic and other acids) commenced in the papillary layer of the subepithelial mucous membrane, I instituted a series of experiments in mercurialization of dogs

Dogs for the purpose were picked up in the streets Some of these were operated upon by myself alone, others with the assistance of friends Care was taken to secure those in health and with healthy gums Mercury was introduced by the mouth, skin and hypodermic injection It was no easy matter to get them under the influence of the drug, since the power of the glands to eliminate the poison was enormous In no case was salivation produced The first symptom noticed was exhileration, which would last from three days to a week Then paralysis agitans would continue until death In about a week the appetite would commence to fail and it was difficult to get the dogs to take food of any kind The kidneys and bowels eliminated the poison There was a rise in temperature Some of the dogs died before gingivitis was observed This demonstrated that not only does the nervous system become involved, but the organs of the body may be morbidly affected and death ensue before the gums show symptoms of disease Some dogs were killed after the gums became diseased The time required to obtain results was from three to eight weeks The age and physical condition of the dog caused this variation in time After death the gum tissue was dissected from different parts of the jaws and placed in either 50 per cent alcohol, Muller's fluid, or 2 per cent formalin

Sections of tissue from the gum margin and sides were made on a number of places Some were imbedded in paraffin, others in celloidin The sections were stained according to various methods Delafield's hematoxylin, eosin (Unna's), alkalin methyl blue, carmin, Gramm's stain, etc

Microscopic examination showed that the epithelial lining of the gums did not present pathologic changes, but appeared normal in every respect Connective tissue below the gum epithelium (the tissue analogous to the papillary layer of the derma and the derma proper) presented unmistakable evidences of a mild inflammatory process There occurred in this connective tissue round-cell infiltration, generally moderate, but in some places quite dense This cellular infiltration extended from below (where it was densest) upward into the papillary layer (Figs 13, 14) The densest cellular infiltration usually occurred around the vessels (Fig 14)

Under high magnification, the cellular infiltration was found to consist of polymorphonuclear leucocytes, plasma cells and plasmamast cells, the latter with coarse basophilic granulations (Figs 15 and 16)

In some places were seen, between the round cells, short, broad fusiform cells, the protoplasm of which took quite well basic methyl blue These cells resemble very much fibroblasts, and appear to be derivations of the plasma cells No bacteria were found either in the areas of cellular infiltration (inflammatory areas) or elsewhere In these cases it is obvious that there had occurred a mild inflammation of the gums (gingivitis)

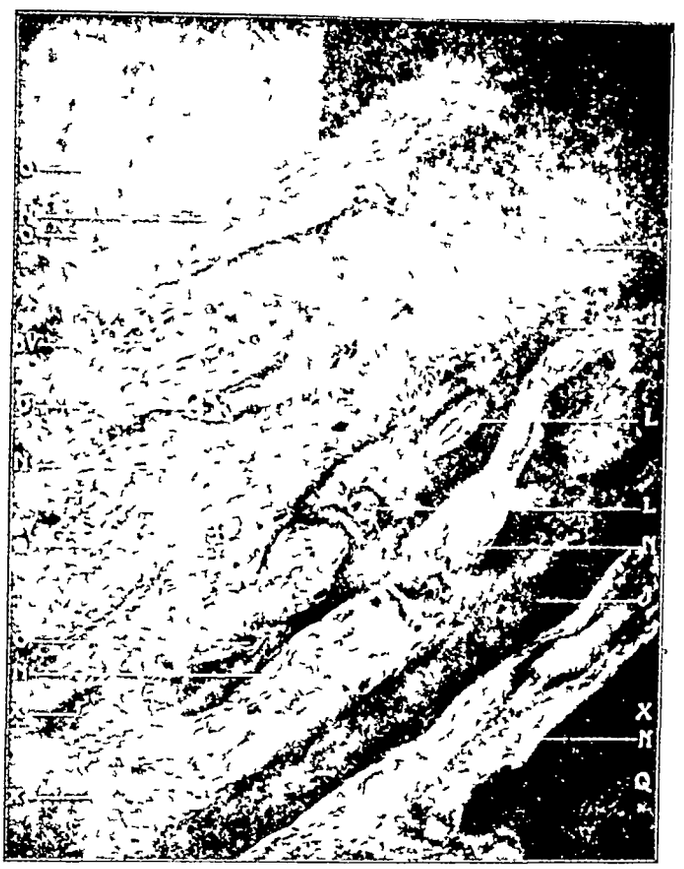

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Fig 8 —Longitudinal Section of Alveolar Process Chronic Inflammation Extending throughout Showing Halisteresis and Lacunar Absorption Dog —J Alveolar process L, Haversian canals N, Large spaces arising from absorption of the trabeculæ, starting in the Haversian canals O, Lacunar absorption Q, Halisteresis ossium or decalcified bone X Remains of calcified bone BV, Blood vessels originally Haversian canals

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Fig 9 —Transverse Section, Alveolar Process Chronic Inflammation Extending throughout Dog —J, Alveolar process N, Large spaces arising from absorption of the trabeculæ, starting in the Haversian canals P, Perforating canal absorption Q, Halisteresis ossium or decalcified bone X Remains of calcified bones EO, Endarteritis obliterans FG Fat globules

While this could not be seen with the naked eye microscopic examination demonstrated histologic features of an inflammatory process The absence of bacteria justified the belief that this inflammation was not of microbic origin but due to mercury, which by its well-known chemotactic influence produced the histologic changes of an inflammation

The bacteric etiology of interstitial gingivitis has been incidentally discussed by many writers

Galippe[1] was probably among the first to make analytic experimentation in the bacteriology of this disease He claims that there is found in the pus of pyorrhea a parasite resembling in shape the Greek letter N Injecting this into the belly of a guinea-pig abscesses resulted which had a special tendency to affect bone tissue

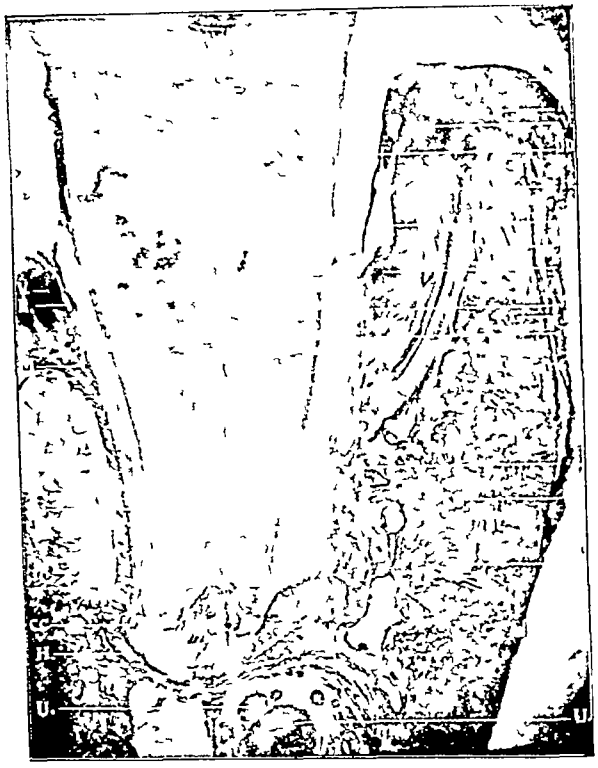

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Fig 10 —Longitudinal Section of Tooth Alveolar Process Peri dental Membrane Showing Interstitial Gingivitis and Pyorrhea Alveolaris with Tooth About to be Exfoliated Dog —C Cementum E Epithelial tissue H Periosteum I Peridental membrane J Alveolar Process K Capillaries L Haversian canals M Fibrous tissue R Pus pockets U Nerve tissue V Violent inflammation AA Point of union of epithelial tissue and peridental membrane CC Cementosis DD Calcific deposits destroyed by acids

Injections into the space between the teeth and gums were negative in result Galippe regards his experiments as suggestions for further research, but not demonstrative Miller,[2] after explaining his own methods, made a series of culture experiments on agar-agar blood temperature Twelve cases of pyorrhea in human beings, and six in dogs, were examined He isolated twenty different bacteria from human beings and nine from dogs Among the twenty kinds, staphylococcus pyogenes aureus was found twice, staphylococcus pyogenes albus once, streptococcus pyogenes once Of the other sixteen nine subcutaneously injected produced no particular reaction, four a slight three a severe suppuration in the subcutaneous connective tissue Among the nine species found in dogs, staphylococcus pyogenes albus occurred once Of the other eight, two subcutaneously injected caused no reaction, and five but slight One caused very profuse suppuration by which large portions of skin exfoliated Microscopic examination of stained sections revealed masses of different bacteria cocci and bacilli Leptothrix occurred infrequently, and then only on the surface of the cement, and where there were microscopical cavities in it Miller succeeded consequently in cultivating a large number of bacteria from pyorrhea alveolaris which possessed pyogenic properties but was not able to determine the constant occurrence of any one which might be regarded as the specific micro-organism of pyorrhea alveolaris Miller remarks that it is not evident from Galippe's

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Fig 11 —Longitudinal Section of Tooth Alveolar Process Peri dental Membrane and Gum Tissue, Showing Active Inflammation with Pus Pocket Dog —C Cementum E Epithelial tissue G Submucous membrane I[1] Inflamed peridental membrane J Alveolar process L[1] Inflammation extending through enlarged Haversian canals M[1] Inflamed fibrous tissue R Pus pocket V Violent inflammation AA Point of union of epithelial tissue and peridental membrane FF Food containing micro-organisms

communication whether he found the N bacterium in all cases examined or but once

Sudduth, after repeated examinations, arrived at the same conclusions as Miller

In order to determine whether a specific bacterium existed in the pyorrheic stage of interstitial gingivitis in man (necessary to constitute this stage a special disease) pus from more than fifty cases was examined In all, the pus was obtained from the gums by a platinum needle under proper methods of sterilization The pus from some cases was smeared on a slide This was stained and such determination made as was possible with this procedure With the pus from fifteen cases, agar was inoculated and placed in Petrie's dishes The individual colonies were grown on gelatin, agar, bouillon, potato and blood serum The results were as follows.

1 Die Infectiose Arthro Dentaire Gingivitis 1888
2 Micro-organisms of the Human Mouth

In fifteen cases in which the organisms were plated out, 55 organisms were found In two there was no growth Two had 1 species of germs, two had 6, one had 7 and one had 10 The germs found are divisible into three classes Those usually pathogenic to man, those exceptionally pathogenic to man, and those never pathogenic to man The first class were found 30 times the second 12, and the third 13 Class third is no doubt, seemingly smaller than it should be, since many members of it probably do not grow on ordinary culture media Of the germs most frequent and important, staphylococcus pyogenes aureus occurred nine times, staphylococcus pyogenes albus six times and staphylococcus pyogenes citreus once A lanceolate diplococcus, growing like pneumonococcus was found six times Streptococcus pyogenes was found twice Bacillus coli communis was found twice A bacillus growing like the diphtheria bacillus occurred twice This last bacillus had the appearance of the Klebs-Loeffler bacillus It lay on the slide like it and stained irregularly Of the less impor-

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Fig 12 —Longitudinal Section of Tooth, Alveolar Process Periodental Membrane and Gum Tissue, Showing Active Inflammation with Pus Pocket Dog —C, Cementum E, Epithelial tissue J Alveolar process M¹, Inflamed fibrous tissue R, Pus pocket V, Violent inflammation

tant organisms, bacillus pyocyaneus was found three times, micrococcus tetrageniis seven times, leptothrix seven times bacillus mesenteri us twice, bacillus subtilis three times There was also present a peculiar large club-shaped fungus somewhat resembling the degenerative forms of actinomycosis

Did these examinations stand alone, definite conclusions could not be drawn from them These, however, are admissible, since all observations on this subject tend in the same direction While, as already stated, Galippe believed that he had isolated two bacteria capable of causing pyorrhea alveolaris, still he failed to produce the disease This failure, according to the laws of Koch, is fatal to the position taken

An examination of cases of interstitial gingivitis which had not reached the pyorrheic stage had the following results Pieces from the gum margin which had been fixed and hardened in a formalin solution were partly imbedded in celloidin, partly in paraffin The

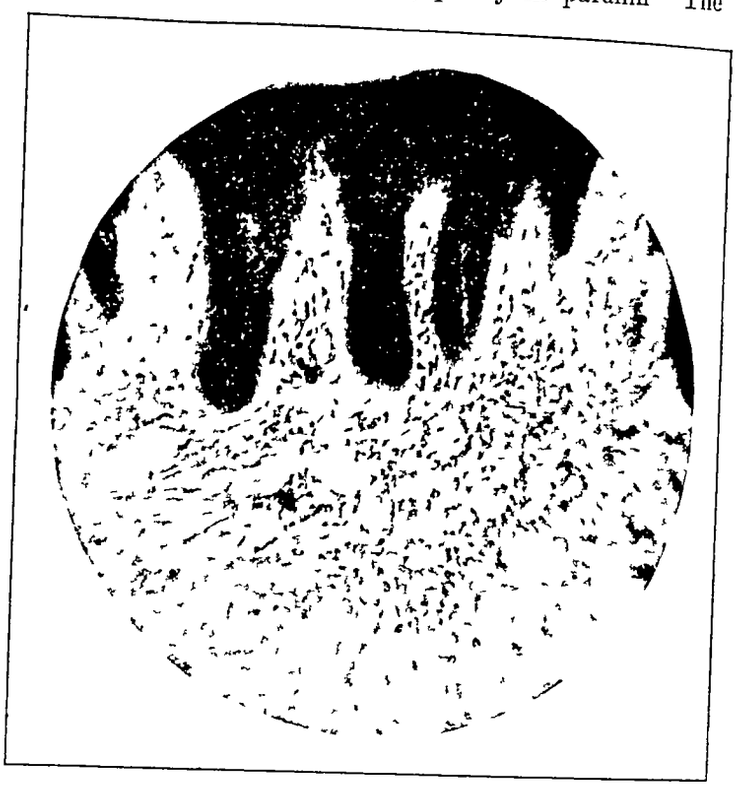

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Fig 13 —Longitudinal Section of Gingival Border, Showing Round Cell Inflammation Due to Mercurial Poisoning

sections were stained according to various methods, including Gramm's, eosin (Unna's) and alkaline methyl blue stain The examination of the tissue shows an

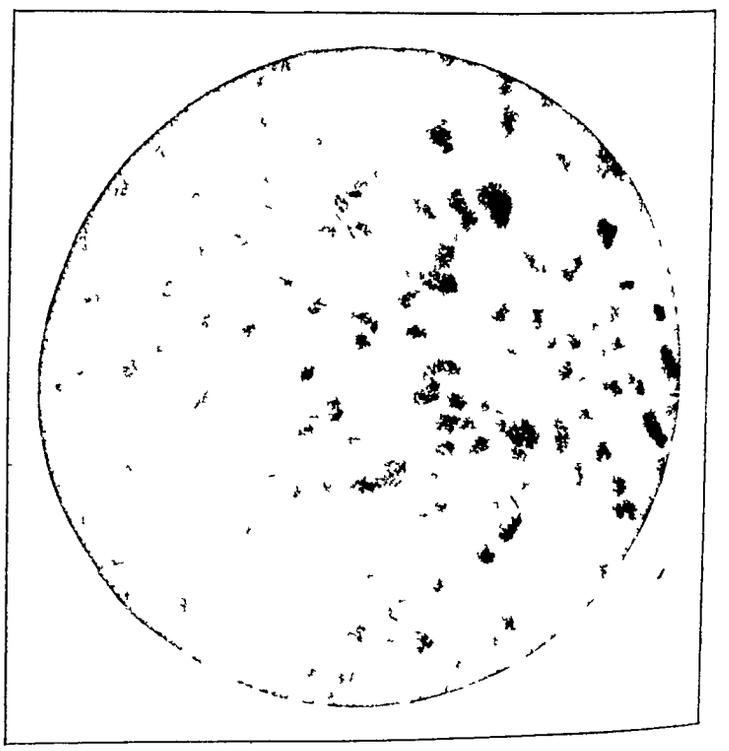

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Fig 14 —Longitudinal Section of Gingival Border Higher Magnification, Showing Connective Tissue Infiltration with Plasma Cells and Polynuclear Leucocytes Dog

unchanged lining of stratified squamous epithelium, and, in the connective tissue below the former, well-marked evidences of an inflammatory process The round-cell

infiltration is best marked in the deeper layers toward the periosteum, while the layers of connective-tissue fibers nearer to the lining epithelium show less evidences of inflammation and are partly entirely free from any round-cell infiltration The infiltrating round cells are of the type of lymphocytes, plasma cells and plasma mast cells Very large and typical mast cells are frequently found in the neighborhood of small vessels Many of the vessels seen are quite tortuous, and the vascular supply of the connective tissue appears to be considerably increased beyond the normal Bacteria could not be demonstrated in the inflamed areas

Examination of the interstitial gingivitis produced by mercury in dogs failed to reveal any bacteria The histologic changes of inflammatory type found were due to the chemotatic influence of mercury and not to microbic action

In a paper read before the Section on Stomatology of the AMERICAN MEDICAL ASSOCIATION at Columbus Ohio, George T Carpenter mentioned some very interesting experiments in this connection By infecting a fresh wound in the gums of rabbits with pyorrhea and other pus he found the parts will remain infected only from two to five days In other rabbits a rubber band was placed around teeth and pressed under the gums until inflammation resulted, when the parts were infected with pyorrhea and pus from a chronic ulcer, pus infection resulted

Like experiments were made in the human mouth on gums which had been neglected as well as on healthy gums and with similar results His experiments tend to show that when animals and men are healthy, the tissue resists infection, but when diseased, infection results All yield to treatment

On examination of pus taken from pyorrhea pockets proceeding from acute infection two competent bacteriologists were unable to find a micro-organism not found in pus from other infected tissues

These results, in Carpenter's opinion, tend to show that a specific germ, to which pyorrhea alveolaris is attributable, has not yet been found

The disease being so prevalent among dogs, it occurred to me that they would be of great value for experimental inoculation The prevalence of the disease in dogs suggests that if it were a specific infection these must be inoculable Miller[3] had made a few inoculations of pus as well as of the deposits around the teeth Slight inflammation, and, in one case a little suppuration alone resulted He afterward isolated twenty different bacteria from the human mouth and nine from dogs Some of the uncommon varieties were infective but without marked results Isolated varieties would probably not produce results that could be attained by inoculating animals with the fresh secretion (pus and other deposits) from dogs already affected with the disease A dog was procured from the Veterinary Hospital whose gums and outer alveolar process were almost entirely absorbed with pus exudate Street dogs selected for inoculation were forty-six in number, ranging in age from 1 year to 7 They were of all breeds and conditions Some were well fed, others very thin Many had sound, healthy gums, others had slight inflammation at different localities No dog was used whose gums and alveolar process had become infected or whose tissues were absorbed Two dogs were operated upon at a time The gum was separated from the necks of the teeth down to the alveolar process and peridental membrane—one-half at the canine, the other at the second pre-molar, since in a majority of cases the disease began at the canine tooth, probably on account of its prominence and the thinness of the alveolar process The second pre-molar was selected because it is the least prominent The secretions about the teeth and gums of the diseased dogs were collected upon a platinum wire (previously sterilized) and conveyed to

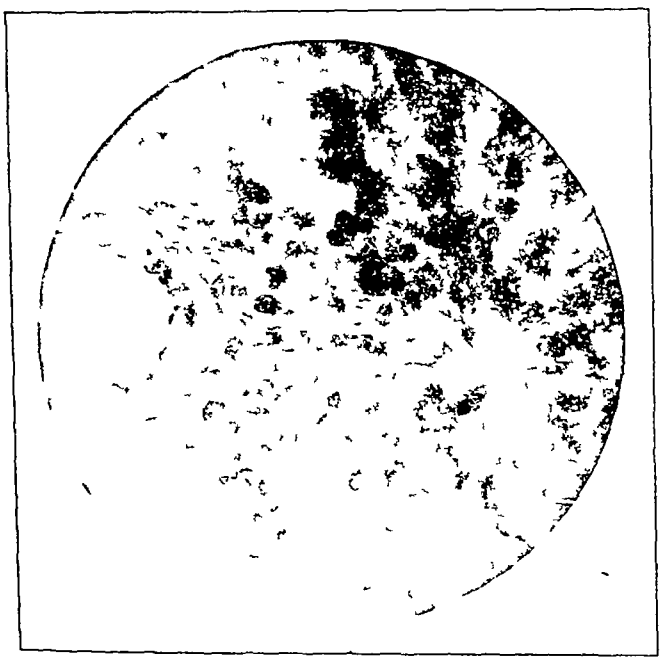

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Fig 15—Longitudinal Section of Gingival Border Higher Magnification Showing Round Cell Inflammation Extending to the Inner Coat of the Blood Vessel and also Plasma mast Cells

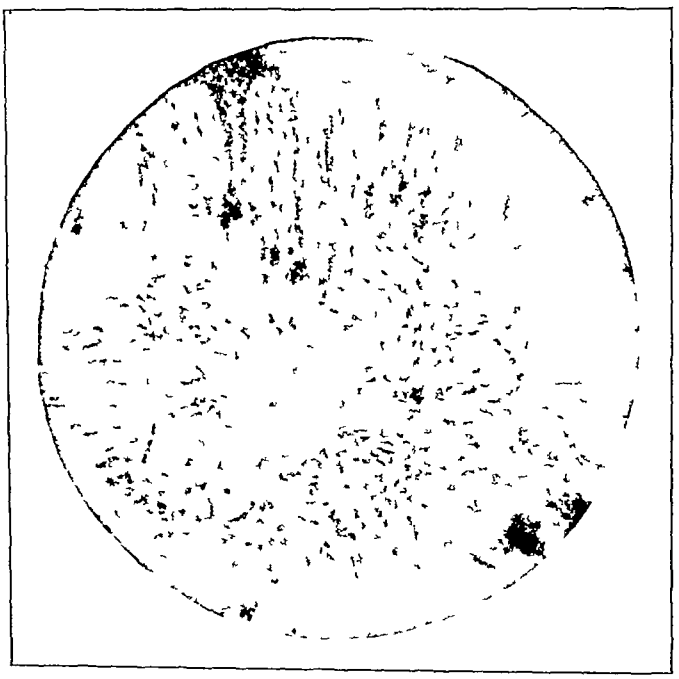

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Fig 16—Longitudinal Section of Gingival Border Showing Round Cell Infiltration in the Connective Tissue and Extending into the Papillæ Dog

3 Ibid p 329

the injured parts Thirty-nine healed in eight days In these the gum tissues were healthy The pus had no effect The wounds healed as rapidly as any wounds possibly could In seven the gums were inflamed and infection occurred Suppuration was slight in four and considerable in three The pathologic findings in these cases were not unlike inflammation and infection in other tissues Similar results would, no doubt, have taken place if inoculation had been performed with pus from an abscess The last three dogs were allowed to depart at the end of four weeks with slight pus infection

While hundreds of slides could be adduced in support of this chain of evidence, sufficient have been given to permit of the introduction of evidence from other phases of the subject

(To be continued)

ANTHRAX, WITH REPORT OF A CASE*

WILLIAM ROUSH M D
SPENCERVILLE, OHIO

Anthrax is one of the rare but very interesting maladies afflicting the human race which few physicians have the opportunity of seeing in the active form It is an acute, parasitic, infectious disease, known also by the synonyms of malignant pustule, splenic fever rag-pickers, wool-sorters and furriers' disease also Milzbrand and carbunculosus contagiosus and a number of others As to its history and antiquity we know but little but that it has existed for centuries there can be no doubt

Blanc states that he finds our modern anthrax to have been the disease of the Egyptian plagues, but Hamlet on the other hand thinks this is only a matter of speculation

To the researches of Pollender in 1855 and Davine in 1863 belong the credit of the discovery of the B anthracis, the positive and only direct factor in the production of the disease It has been said by good authority, that the discovery of, and experiments with, the B anthracis has resulted in contributing more to our knowledge of bacteriology in general than work upon any of the other infectious diseases

The B anthracis is a non-motile minute rod-shaped body, ranging in length from 2 to 3 up to 40 or 50 microns, and presenting the appearance when stained of a strand of beads

In persons or animals suffering from this disease, the bacillus may be found in the pustules, blood urine, feces and tissues, especially the spleen, liver and lungs When taken from these sources it can be developed in pure culture, which, if some other susceptible animal be inoculated will produce identically the same condition as that found in the animal from which it was taken When taken direct from the pustules or from any part of the animal suffering from the disease, it is in the form of short rods and square at the ends, the diameter being greater and the length shorter than the pure culture cultivated artificially If cultivated artificially, as it can be on any of the ordinary culture media in eighteen to twenty-four hours at the temperature of the body which is most favorable for its rapid development, the short rods develop into long threads and remain in this condition until a change in surroundings occur the most important being a diminution in the nutritive supply which favors the production of spores

Abbott says that spores will not form in a temperature under 12 C, or above 43 C Spores do not form within the body of living animals, but spores introduced into living animals produce the disease These spores are capable of resisting very deleterious influences Esmarch says, spores from some sources can be killed by exposure to steam one minute, while others resist the same temperature for twelve minutes These spores have been seen to continue in the living though inactive condition for long intervals and retain their virulent qualities

Billings says that in 1876 he inoculated a piece of silk ligature with the anthrax spores and placed it in a bottle which was subjected to no other changes than those in the room in which it was kept At various times during the seventeen years that followed, he cut bits of the ligature and placed it under the skin of a rabbit, and in every instance was the disease anthrax produced in typical form and the animals died, the last being in 1893 with similar results He also cites another instance, in which he claims a horse became infected from having worn a harness made from the skin of an animal that died with anthrax

Within the past ten days I examined a culture of anthrax developed from a tube in which I had inoculated direct from a patient Oct 22, 1897 The tube of agar-agar from which the culture was made had remained in my office all this time 3½ years, and for the past 18 months had been concealed in an air-tight box The contents of the tube had so dried up that it was a mere thin shell and a piece of this placed in a fresh tube gave an excellent culture in twenty-four hours

As to its virulency at the present time I can not say as I did not inoculate any animal, but a culture from the same tube in November, 1897, when tested by Professor Kramer, proved sufficiently virulent to kill a mouse in about twenty-four hours

As to the formation of toxins there are some differences of opinion Most bacteriologists claim the bacillus of anthrax generates toxins, while Conradi[1] says we have no evidence to prove the general assumption that the bacillus of anthrax generates a toxin On the contrary everything tends to indicate that the anthrax bacillus is a typical infectious micro-organism As to the etiology there is but one direct factor and that is the bacillus of anthrax, which is introduced into the person or animal, either from some other person or animal suffering from it, or who resided in an anthrax center or from some of the earth, vegetation or water from one of these centers, which simply means localities where the bacillus is found in the earth

Cattle and horses nearly always contract the disease while grazing over these localities, or in drinking water found in cess pools or near them

The conditions which seem most favorable for their development in the earth are, 1, presence of the bacillus of anthrax, 2, a rich black loamy soil with sufficient moisture and high temperature, 3, profuse vegetation and rapid decay of same

The season of the year most favorable for the development of the bacillus in the soil is from about the middle of July to the middle of October In seasons in which prolonged drouth and high temperature have been preceded by much rain and luxuriant vegetation

These centers are most frequently found in the torrid zones, less frequently in the temperate zones, and occa-

* Read before the Alumni Association of the Cincinnati College of Medicine and Surgery, May 1, 1901

1 THE JOURNAL A M A Sept 23 1899

sionally found in the frigid It has been shown to exist in Siberia and Lapland In our own country, as far as is known there are four well-established centers in Canada, namely, Guelph, Acton, Listowell and Kingston [2]

Within the United States it has been found in Massachusetts, Pennsylvania Virginia, Maryland, Michigan, and most of the states lying in the Mississippi valley also California had an outbreak some two years ago which resulted in the loss of many cattle In Ohio no doubt there have been various cases, but I have not been able to find any account in medical literature of any case, except the one which came under my observation and treatment about three and a half years ago

From all the inquiry and investigation of the same community from which this case came there is nothing to show that there had ever been any disease in any person similar, but there is a history of some form of infection in the horse from which this patient became infected The symptoms of the horse were extensive edema of head and part of the neck, and a profuse purulent discharge from the nostrils mouth and eyes, which lasted

Fig 1 —One hundred and twenty hours after inoculation

nearly two months and ended in recovery No examination either by veterinarian or physician had been made of this animal but from the similarity of the symptoms and the fact that the patient contracted the disease by being switched in the face by the same horse, shows strong suspicions that the affection of the horse was anthrax

SUSCEPTIBILITY AND IMMUNITY

The susceptibility of the mammalia to anthrax may be expressed in the following order herbivora, omnivora and carnivora This is largely due to the manner of obtaining food and modified much by the kind of food and locality from which it is obtained Mice, guinea-pigs, and rabbits are most highly susceptible, and the ones used for experiments

An injection of virulent anthrax in any of these animals will produce death in twenty-four to forty-eight hours In man, while not the most susceptible, nor by any means immune when fatal results do come, it is usually within ten days from time of inoculation Patients passing beyond this time usually recover, but rather slowly, on account of the loss of tissue from sloughing and gangrene

A patient is not rendered immune by one attack and is just as liable to a second or third attack as the first

Invasion —There are three common avenues for the introduction of the poison 1, through abrasions of the cutis or wounds of any kind, 2 digestive tract, 3, respiratory tract

Incubation —The period of incubation in animals as in man is from a few hours to several days This is modified by the amount of bacilli introduced, by the degree of their virulency and the rank held by the person or animal in regard to susceptibility or immunity

Clinical History —Two leading clinical types are distinguished, namely external and internal A clinical report of the two following cases will fairly illustrate the symptoms and conditions of both varieties, though

Fig 2 —Eighteenth Day

both were inoculated externally, one in the right eye, the other in the left and both cases showing marked external edema in about the same degree

The case in which but few internal symptoms developed showed more severe external symptoms and recovered, while the case with the most marked internal symptoms resulted fatally on the fifth day after inoculation, which is shown in the report of the following case, also reported elsewhere [3]

C B, aged 59, a native of Germany and laborer in a hair factory, came to the Johns Hopkins Hospital Dispensary on Saturday May 11 1895 complaining of the swelling of the lids of the right eye His history was as follows

Family History —His father and one brother died of some lung trouble, the exact nature of which he does not know, one brother died of cancer of the liver The family history is otherwise negative

Present History —Two days ago, while working with South American hair he scratched his right eye with his hand as it was itching The next morning he noticed that the eyelids

2 Dr W T Connell in THE JOURNAL A M A Dec 9 1899

3 Johns Hopkins Bulletin Sept-Oct No 1895

were slightly swollen, and itchy and by this morning they were so swollen that he came to the dispensary

At the time of the visit the swelling was confined to the lids of the right eye, and was fairly sharply localized, it was edematous in character, and quite boggy, the overlaying skin appearing almost of a natural color Two small incisions were made, one into each lid, and a small quantity of rather thin, whitish fluid, resembling diluted milk was evacuated Cultures upon agar agar were made at this time, and two days later the tube inoculated showed a pure growth of an organism which resembled the bacillus anthracis, and which upon inoculation killed a mouse in twenty four hours Further tests proved it to be the anthrax bacillus

The patient was admitted to the hospital on May 13, four days from the onset of the disease The physician who attended him at his home from Saturday until his admission on Monday, stated that his temperature had been subnormal during the entire period On admission the patient complained of nothing but slight pain beneath the right side of the jaw, otherwise he felt perfectly comfortable He had no headache or malaise His mind was perfectly clear The following note was made at this time

Patient is in bed on his back Temperature 102 F Pulse 132 per minute regular volume fair, tension not increased Respirations 16 per minute, easy Tongue has a slight white coat The mucous membranes are of a fair color, not cyanosed

Both eyes are closed by edema On the left side the swelling is not so nearly marked as on the right side, the lids being distended by a moderately firm, watery edema The lids of the right eye are much swollen, hard and tense, and the overlaying skin is occupied by several vesicles, varying in size from a pea to a bean, and filled with clear, yellowish serum The eyes themselves appear uninvolved Over the whole of the right side of the face and neck, and extending up onto the scalp, is a marked edema of varying consistency, immediately around the right eye it is very hard, and covered by tense, shiny skin, over the forehead, neck and remainder of the face, as well as over the implicated scalp, it is much less firm, and can be easily pitted by pressure The edema extends across the left side of the forehead, and occupies the neck as low down as the clavicle On the side of the mouth the right cheek is marked with the imprints of teeth, and has a yellow gray sloughy appearance

May 14 10 a m The patient is much worse this morning He had several involuntary passages of urine and feces during the night The mind is quite clear, and he answers questions rationally He complains a good deal of cramp like pains in the abdomen The pains are situated in the umbilical region, and are sharp and constant, with occasional acute exacerbations, during which he has a desire to defecate The abdomen is extremely sensitive to pressure this morning The spleen can not be palpated The pulse at the wrist is almost imperceptible and practically uncountable The heart sounds are extremely distant and feeble The temperature has been subnormal since 4 a m this morning and is now 97 F The right eye is somewhat more swollen than it was yesterday, and the edema now occupies the whole of the scalp, and has spread down the right side of the chest to the level of the pectoral fold, it also occupies all the tissues overlying the upper part of the sternum

The patient gradually sank, and died quietly at 4 p m on the 14th Before death the edema had spread further over the left cheek, and had also extended somewhat further down the chest The patient became very cyanotic before death There was no respiratory distress at any time His mind was perfectly clear to within fifteen minutes of his death On the morning of the 14th he had three loose watery stools of grayish color, and apparently containing no blood The urine was passed involuntarily, and could not be examined

Autopsy, May 15, eighteen hours after death, the body in the meanwhile having been preserved on ice Body 174 cm long, moderately well nourished, strongly built Rigor mortis in both extremities The right eyelids are edematous, closing the eye, they are congested and glazed and the epidermis is peeling off The whole right side of the face below the eye is edematous, and the edema extends over the head and neck The left eye and left side of the face are less swollen The edema is well marked anteriorly over the neck and clavicles, and can be well followed down the chest On incising the skin, above the clavicles, much clear, serum like fluid escapes The edema extends beyond the median line to the left, and is immediately evident after incision, extending to the sternum Subcutaneous fat is moderate in amount

The peritoneal cavity contains turbid fluid, at least 2000 c c of such fluid is present in the cavity The serosa is injected, its reflection lost, the vessels very hyperemic Smaller and larger ecchymoses are seen beneath the serous membrane In the smaller omentum, in the region of the pancreas, a large ecchymosis is seen

In the pyloric region there is in the mucous membrane a large deeply congested area, measuring 8x6 cm in extent It is not clear that there is a false membrane over it, but some grayish yellow material adheres to the surface

The duodenum is congested uniformly Beginning in the jejunum, which is less congested, there occur at intervals small, elevated, deeply congested areas They average 2 mm in width and project 1 mm above the surface of the intestines, they do not seem to correspond with the lymphatic follicles The serosa over them is often the deeply congested, bulged out portion already described, this is, however, not exclusively the case These foci are quite numerous in the jejunum, at least fifteen being present in this part of the gut alone At times two or three were close together, though as a rule they were more separated In the ileum they were also seen, in this situation perhaps a little more separated, but in all as many were present as in the jejunum In connection with one of these areas in the ileum, what appeared to be a false membrane occurred If a membrane, it was thin, and easily scraped away Several of the nodules showed superficial ulceration There was no relation detected to the lymphatic apparatus, and the nodes were less numerous near the ileo cecal valve The large intestine shows no such localized foci, only a diffuse congestion Mesenteric glands were swollen, congested, hemorrhagic, and softened

The second case is the one that came under my observation and treatment three and a half years ago

Elmer C, aged 20, farmer of good habits, health and family history, came to me on Thursday, 7 a m, October 21, 1897, with the following history

On October 18, four days before, while working with a team of horses in the field he was standing directly behind them unloading the wagon One of the horses switched him in the face, which caused quite a burning and itching sensation, about like the bite of an insect This occurred about 11 a m, and he continued to work the remainder of the day with no other symptoms than those of the burning and itching which were present at first

October 19, edema of lower left eyelid with the appearance of small ecchymotic spot about three fourths inch below center of eye Patient worked all day, and by evening the eye was almost closed

October 20, burning and itching same as first two days Eye completely closed, pustules formed over lower lid Edema had spread in all directions and slight discharge from the eye At 4 p m patient applied for treatment to physician, who claimed to have removed a piece of glass from the eye which, if correct, had never produced any pain

October 21, about 7 a m, patient came to my office for treatment the first time The left eye was completely closed, with marked edema of face and head, the left side being much worse than the right The lids looked watery, and there was a profuse purulent discharge from the left eye resembling gonorrheic ophthalmia, and numerous pustules from one eighth to one half inch in diameter covering the lower lid and extending about two inches over the cheek Some of the pustules had ruptured, and the base showing the slough had extended to the tissue beneath the skin Temperature 101 pulse 96, respiration 20 No headache nor pain, but patient was restless Patient grew worse all day, and the following morning, October 22, I saw him at his home By this time the swelling had spread over the entire face and scalp and as low as the clavicle, and was sufficient to produce difficult and labored breathing Temperature 102, pulse 102, respirations

25 Tongue heavily coated, breath fetid, no appetite and very restless Had slept but very little during the night The discharge from the eye and sloughing areas was very profuse At this time I prepared two slides, one from the fluid of a pustule and one from the pus discharging from the eye Upon microscopical examination, both slides showed the short, thick rods of bacillus anthracis In the evening of the same day I inoculated a tube of agar agar, and after eighteen hours, examination showed the presence of bacillus of anthrax in large numbers, and upon this I based and made my diagnosis of anthrax

October 23, edema increasing Both eyes completely closed, discharge greater pustules still forming, and could now be seen in all the stages, a very interesting condition to observe The mucous surface of the left side of the mouth was covered with a grayish white membrane resembling diphtheria and the surface would bleed freely when this was removed Temperature 102 5 pulse 120, respirations 28, deep and labored Very restless some dyspnea and vertigo on rising Could speak but little louder than whisper Could not take any nourishment on account of swelling of mouth and throat Photograph No 1 shows condition of this day

October 24, condition same as preceding day, except breathing was heavier and edema still increasing

October 25, conditions same as before, except the swelling of the right eye was reduced sufficient to permit it to open slightly, but the edema had spread over the entire chest as low as the apex of the heart and presented a bright red appearance resembling the rash of "iodism" Slight pain also developed in the bowels, which lasted for thirty six hours This was the only pain experienced during the course of the disease

October 26 edema decreasing Discharge about same Temperature 100, pulse 100 respirations 22 Voice better Can take small amount of diet and getting some natural sleep Within the next twenty four hours temperature went to normal and never rose above 99 and improvement continued until patient was in good health

On the tenth day a line of demarcation formed as shown in photograph No 2 Within this line everything was gangrenous, except the eyeball and the deeper portion of the eyelids

The sight of the eye was at no time affected, although the eyeball was highly congested The gangrene destroyed all the soft tissue over the cheek, to the periosteum, and all the muscles about the eyes that control the lids

Dr Stuber of Lima, Ohio, directed and treated the eye and has made three plastic operations, hoping to restore better functions of the eyelids, but the results have not been satisfactory

Treatment—Having no experience in any way with this affection and finding but little literature on the subject that seemed to meet the symptoms present, a line of symptomatic treatment was adopted, which consisted of quinin whisky, diuretics and cathartics internally and externally, local application of bichlorid cloths to all parts that were sloughing, boracic acid salve to the eye, after thoroughly cleansing all the discharge from the eye with hot boracic acid solution

On the eighth day after inoculation I found an article by Vockresensy[4] in which he highly eulogizes the use of large doses of carbolic acid internally claiming to have cured sixteen consecutive cases of malignant pustule, and in some it was not begun until the seventh day

In my case it was not used until the eighth day within twenty-four hours from the time of commencing it improvement was noticeable and it was continued until all symptoms of sepsis had disappeared Whether the favorable result was due to use of the carbolic acid I do not know but should I get another case I would begin it promptly

4 Annual of the Universal Med Sciences 1891 vol iii

The main points of interest are 1 Does this one case prove that an anthrax center exists on this farm, the home of the horse and patient? 2 Did the horse really have an anthrax at the time he was suffering from the swelling and discharge from the head? 3 The difference in the symptoms and results of the two cases reported when the points of inoculation were so nearly the same The virulency in either case proved to be sufficient to produce death in mice in twenty-four hours

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INTERESTING THROAT PARALYSES IN A CASE OF LOCOMOTOR ATAXIA OF AN IRREGULAR FORM *

JOHN EDWIN RHODES, A M, M D
CHICAGO

Mr F D R, aged 35, railroad employe, was sent to me Jan 26, 1901 About four days previous to his visit he began to cough occasionally and had at that time noticed some difficulty in articulation, especially in the liquid sounds, *t* and *d*, the labials *m* and *n* were pronounced easily At this time there was noticed occasional though slight regurgitation of liquids into the nasal cavity on swallowing He gave a history of rheumatic pains in the shoulder some four or five years ago, but had had none recently

He confessed to an attack of gonorrhea, but had never had syphilis nor were there any general symptoms indicating such an attack His habits were good, he did not use alcoholics, and used very little tobacco His sense of hearing was good the sense of smell was considerably impaired, vision in the right eye was poor

There were no pains at this time from which he suffered, but he had had sharp lancinating pains in the lower extremities at one time for several years His normal weight was 150 pounds, but now he weighed only 135 pounds His strength was fairly good, the temperature and pulse were normal There was no dyspnea, vertigo, or headache

He complained of a slight tickling sensation in the larynx, which excited cough occasionally The tongue was slightly coated, the appetite fair, the digestion good, but he was habitually constipated Micturition was frequent and could not be controlled very well

Dr C D Wescott, who sent him to me, reported upon his case as follows "In regard to the case of F D R, I would say that he was referred to us last May, by Dr Patrick He came with the diagnosis of locomotor ataxia, and was sent to us because of a drooping of the upper lid of the right eye and a divergence of the same eye He was also complaining of pains in the eyes and head He said that the eye first turned out two years before and had not been straight since Upon examination, it was found that there was complete paralysis of the branches of the third nerve of the right side The ophthalmoscope showed some opacities in the vitreous in the right eye and the retinal vessels were full and hazy in outline The optic nerves appeared normal in both eyes We prescribed glasses which gave him great relief in the use of his eyes for near work, and, about the middle of June, he reported himself decidedly better There was noticeably less ptosis and slight movement of the right eye in was possible We then lost sight of him, and he did not return until we sent him to you on January 26 complaining of his throat On that day there was almost com-

* Read before the Chicago Laryngological and Climatological Society May 2 1901 (See Proceedings p 1801)

plete ptosis of the right upper lid, as well as divergence of the eye His vision was not quite as good as it was at the time of our examination in May, the optic nerve was gray possibly indicating beginning primary atrophy

I asked Dr Patrick as to his condition in May and he reported to me as follows "I first saw F D R on May 3 1900, and found him suffering from rather atypical tabes The right pupil was dilated and had been so for two years Occasionally the left eye would swing outward, giving him double vision He had well-marked incoordination, diminished knee jerks, the left more so than the right I regret to say that my record makes no mention of the pupillary reactions, but I feel quite sure that they were not normal I could get no history or other evidence of specific infection"

Dr Gill had seen the patient previously and reported as follows "F D R called to see me about two years ago, he told me he had been suffering from sharp lancinating pains in the lower extremities for several years An examination of his condition at that time showed exaggerated patellar tendon reflexes, ptosis of the right lid with sluggishness of both pupils to the light There was no incoordination, and no ataxia The last examination, which occurred several weeks ago, showed a change in some of the symptoms, inasmuch as the reflexes had disappeared entirely The lancinating pains had persisted, but still there was no ataxia or incoordination He has difficulty in urinating an inability to completely empty the bladder, also inability to control the sphincter ani at all times There were some areas of anesthesia about the chest His trouble is probably an irregular form of locomotor ataxia"

I found the nasal cavities comparatively normal When the mouth was opened, and the tongue depressed for an examination of the throat the soft palate was in a normal position On irritating it with a probe, however, the right side of the palate was contracted strongly to the pharyngeal wall, drawing the uvula toward the right, the left side of the palate not responding at all to the irritation, but remaining relaxed and stationary There was no anesthesia of the parts

On examination of the larynx the right vocal cord was stationary in the median line, there being a paralysis of the posterior crico-arytenoid on the right side—the abductor of the vocal cord All other conditions of the throat were normal

The diagnosis then was an ascending sclerosis of a locomotor ataxia causing ptosis of the right eyelid and divergent squint of the right eye, paralysis of the left half of the palate, and abductor paralysis of the right vocal cord

The motor nerves affected were interesting The palate derives its motor stimulus from the otic ganglion of the fifth, supplying the tensor palati, the facial supplying the levator palati and azygos uvulæ The recurrent laryngeal supplies the posterior crico-arytenoid, the third supplies the levator palpebræ, and the sixth, the external rectus of the eye

The diagnosis should not be difficult The throat conditions might be confounded with those found in the acute form of bulbar paralysis, but the rapidly progressive nature of this disease with its symptoms would enable one to easily exclude it In this case the history, with the symptoms and signs of ataxia, although not altogether typical, satisfactorily settled the diagnosis as due to a progressive and upward sclerosis involving finally these nerves at their origin in the bulb

34 Washington Street

THE DIAGNOSIS OF DIAPHRAGMATIC HERNIA *

E FLETCHER INGALS, M D

CHICAGO

The diagnosis of diaphragmatic hernia presents many difficulties in the living subject, so great indeed are these that the condition is seldom recognized until operation or death has yielded an ocular demonstration The affection is found in rare cases at autopsies and it is occasionally discovered in the dissecting room in bodies dead of other affections, but all told only a little over 300 cases have been reported H I Bowditch reported a case in 1847 and at that time collected reports of 88 cases Leichtenstern[1] reported a case in 1874 and at that time collected reports of 250, but only five of these were diagnosticated before death Thoma[2] collected 290 cases in 1882 and many more have since been reported, but still the obstacles to diagnosis remain, although as shown by Leichtenstern, and by Abel[3] in 1894, there are some cases in which a reasonably positive diagnosis may be made without great difficulty As I have elsewhere stated[4] "This affection possesses many symptoms and signs in common with pneumothorax, like which it causes distention of one side, displacement of the heart, diminished motion, tympanitic resonance and feeble or suppressed respiration with metallic tinkling" The history will often be of the greatest aid in reaching an accurate conclusion In the cases collected by Bowditch, 26 were congenital and the rest traumatic The principal symptoms noted were dyspnea on exertion and sometimes on lying down, pain in the bowels, especially after a full meal, in those where the opening through the diaphragm was small, and vomiting in several cases where the stomach was wholly or in part within the chest In most of the cases the pulse was disturbed and in a few it was weak and rapid In 27 per cent of these cases the patients were in good health and engaged in active business

In Abel's case the symptoms, which came on suddenly were those of obstruction of the bowel, with vomiting, profound collapse, retraction of the abdomen and distention of the left side He based his diagnosis upon the retraction of the abdomen, distention of the left side with tympanitic resonance and displacement of the heart to the right, with the collapse, and absence of any passages either of gas or feces from the bowels In his case it was impossible to introduce a stomach tube through the cardiac orifice, therefore this organ could not be irrigated In Leichtenstern's case he was able to demonstrate the presence of stomach and intestines in the pleural cavity and to note changes in them from the introduction of water and air This patient complained of dyspnea on exercise, but worse during eating There was slight cyanosis of lips increased respiratory frequency and almost an absence of heart dulness Percussion and auscultation over front of thorax yielded normal signs Heart sounds muffled and loudest at lower end of sternum Abdomen flattened Posterior part of thorax slight loss of motion and prominence below the left shoulder blade Percussion and auscultation normal to lower angle of left scapula Below this a hollow, deep, tympanitic note In this region absence of vesicular breathing, instead

*Read before the Chicago Laryngological and Climatological Association, May 2, 1901 (See Proceedings p 1801)

1 Leichtenstern Berliner Klin Wochenschrift, 1874 p 497
2 Thoma Virchow's Archiv, vol lxxxviii, p 515
3 Abel Berliner Klin Wochenschrift 1894, p 84
4 Dis of Chest, Throat and Nose, 1900, 4th Ed, p 88

of this, high-pitched metallic inspiration and expiration, transmitted from the bronchial tubes, the inspiration loudest Metallic tinkling and succussion sounds part of the time The exact extent of area of metallic resonance and breath sounds was determined by auscultatory percussion The borders where the metallic notes ceased abruptly varied considerably at different examinations At times over the lower part of the chest the metallic breathing and quality of the percussion note would disappear entirely and the resonance would merely appear exaggerated, at other times it would occupy a larger area and invade the axillary region and even send a tongue-like projection to the left border of the sternum During percussion the pitch would run up and down the scale from deep to high notes, or the reverse He believed this the result of peristalsis and emptying of the stomach or colon or filling of same with gas At times percussion produced notes of varying pitch at different parts of the affected area, indicating more than one cavity At the lower part of the left and back of the thorax, dulness would be noted at times The border of this would change with changes in position of patient (Contents of stomach) He based his diagnosis on the following points Percussion showed in the lower left side of thorax behind a hollow cavity that applied itself to the chest wall in a changeable area It changes its position shape and volume in a very short time The circumstance that at times metallic resonance was absent in the affected area while there was also absence of fremitus and vesicular breathing at all times over the area, showed that the cavity persisted but the metallic resonance was lost because of filling of the cavity with contents or because of its contraction When this contraction occurred the lung tissue and vesicular breathing encroached on the area of the cavity, the lung expanding and following it up The shifting of the upper border of the area of dulness showed that the cavity contained at times movable contents, and the size of this area indicated the presence of the stomach The different pitch of certain areas of metallic percussion that at times were separated from each other by areas of dulness was explained by the presence of more than one cavity (Small intestine, colon, stomach) The breath sounds over the area were either metallic or often absent The respiratory sounds he thought were changed in quality and acquired a metallic character by transmission through smooth-walled cavities The pitch of the metallic breathing was decidedly less intense than that heard in the pneumothorax, because the sound was not transmitted through the pleural cavity alone, but also through the gastric and intestinal walls At times the metallic breathing was heard only with inspiration, whereas in pneumothorax, on account of greater compression of the lung, the expiratory sound is the loudest In addition, gurgling, either simple or metallic in quality, was heard, also the metallic tinkling and splashing sounds, with bursting bubbles trickling and pouring sounds, such as are heard in diarrheas or ecstasis of the stomach These sounds were at times very frequent, at other times absent Leichtenstern argued that where similar sounds are heard in the normal thorax in the axillary and infrascapular regions if the stethoscope is applied to the stomach or intestines it can be readily shown that these sounds are far more intense in the normal situation of these organs, whereas in diaphragmatic hernia the dislocation of the intestines or stomach encourages the formation of peristaltic sounds through the place of communication of thorax and abdomen, and these sounds are louder by far in the thorax than they are when listened for over the abdomen After old pleurisy with high location of the diaphragm the stomach and intestines can occupy a high situation, but here we have a retracted and not distended thorax, with scoliosis, etc Succussion sounds in this case showed the variable character belonging to all the other signs When they were present they were deep, showing a large cavity (Stomach)

Almost all reported cases of diaphragmatic hernia show great variability in the signs

Pneumothorax the affection with which diaphragmatic hernia is likely to be confounded, results from pulmonary tuberculosis in 90 per cent of all cases and in probably all of these is speedily followed by effusion of serum or pus into the pleural sac The affection develops without the history of an injury In the remaining 10 per cent nearly all result from traumatism, and in most of these inflammation of the pleura speedily follows with effusion of fluid, though in a very few there may be no infection and the air may be absorbed without causing any effusion In pneumothorax dyspnea may come on suddenly or gradually and we may often hear amphoric respiration, especially in expiration, which may be either intense or feeble and which disappears when fluid rises high enough to cover the opening into the air passages When fluid and air are present in the pleural cavity we may often hear metallic tinkling during the respiratory acts and we may obtain distinct splashing sounds by shaking the patient's body while the ear is applied to the chest The heart is constantly crowded to the opposite side, where it remains without variation Diaphragmatic hernia is congenital or occurs through congenital defects in about 38 per cent of the cases that have been recorded and in many of these it does not cause marked symptoms unless the hernia becomes strangulated In about 60 per cent of cases the affection is traumatic and therefore the history is quite different from that of pneumothorax The dyspnea in hernia may come on suddenly and as suddenly subside, whereas, that of pneumothorax is more continuous I have elsewhere stated that there is no amphoric respiration in diaphragmatic hernia but the reverse of this is maintained by others I can not understand how typical amphoric respiration could be produced in diaphragmatic hernia, although I know that similar though more distant sounds, especially on inspiration, are sometimes heard These, I believe, are caused by the transmission of the bronchial sounds through the intestines or stomach, some parts of which are distended by gas The most important factors in the differentiation of non-strangulated cases are the following

1 The metallic tinkling in pneumo-hydrothorax and a similar sound, though different in quality, may be heard at times in diaphragmatic hernia The quality of the sounds produced in the bowels and in the pleural cavity would often be sufficient to differentiate between them but this quality can not be accurately described, therefore the principal value of the sign depends upon the fact that in pneumo-hydrothorax it is heard only with respiratory movements or upon shaking the body, while with the hernia it occurs independently of these movements and is associated with rumbling or gurgling of gas in the stomach or bowels which have escaped into the pleura

2 The displacement of the heart, which in pneumothorax remains practically constant, in diaphragmatic hernia may vary with the varying contents of the stomach or bowels, as when the patient is fasting or soon after eating or drinking freely The retraction of the

abdomen may prove of some value as a sign, and the symptoms of obstruction will be of the utmost importance if strangulation occurs In a case saved by operation that was recently reported by E W Walker,[5] there was the history of a severe injury, with symptoms of intestinal obstruction and "diminished expansion of the left side of the chest, tympanitic resonance at the base of the left lung amphoric breathing, succussion sound on shaking the patient and the apex of the heart was displaced two inches to the right" In this case there had been a fracture of two ribs and the patient had some pain in the left side, which leads one to suspect a rupture of the lung with pneumothorax, in addition to the knuckle of bowel (involving 8 inches of the gut) which was firmly held in the rent in the diaphragm Walker cites numerous authors and states that among the symptoms named dyspnea, intense pain, and cough are the most prominent and that tympanitic resonance over the prolapsed gut amphoric tinkling and sometimes succussion sounds are present

The symptoms and signs must necessarily vary greatly according to the cause the nature of the injury, when traumatic and the condition of the organs protruding from the abdominal cavity Larcher found that in about 91 per cent of 275 cases no hernial sac existed The signs would doubtless vary considerably in the cases in which the intestines protruded freely into the pleural cavity and in those where they were held down by the overlying pleura

An interesting case has recently come under my observation that I believe to be a diaphragmatic hernia, but several skilled diagnosticians look upon it as a case of pneumothorax The question has not yet been settled, but in view of the symptoms and signs I think the members of this society will be interested in each making a diagnosis for himself The case is as follows

A gentleman 29 years of age came to me Dec 31 1900, with the following history Ten days previously, while walking on the street in the most vigorous health he was occasionally taking very deep inspirations as was his habit, for the mere satisfaction of filling the lungs Suddenly there was a pain and something seemed to give way in the lower outer part of the left inframammary region He became faint and had to sit down for some minutes, but partially recovering he walked on a couple of blocks to a friend's office, where he sat down again He became so faint and short of breath that he was obliged to be taken home He felt better the following day and was on the street soon again, though he had an uncomfortable feeling in the left side and occasionally had mild attacks of dyspnea and faintness He also noticed frequent splashing sounds or sensations referred to the left inframammary region About a week after the first attack, as the result of climbing the stairs of an elevated railway station, he had a distressing attack of dyspnea and faintness He rode on down town but felt so badly that he immediately returned home He consulted Dr William M Harsha, and a day or two later came to see me He had the appearance of perfect health and complained of nothing excepting slight discomfort in the left side and some shortness of breath About ten years before he had a bad cough for two or three months while an attendant at a hospital, but he recovered immediately on leaving the institution and he had been in perfect health ever since There was no hereditary tendency to any disease There had been no increase of temperature since the accident, indeed, the temperature and pulse had been slightly subnormal most of the time No cough or expectoration Appetite good and digestion normal He had just eaten a hearty supper before calling on me, which apparently modified some of the physical findings Abdomen somewhat retracted with marked transverse furrow across the upper part of the umbilical region about on level with end of tenth ribs Chest normal form, but movements of left side much diminished Apex beat of heart about 2 inches to right of normal Spleen and liver could not be detected below the border of the ribs Percussion and auscultation yielded normal signs over right side Left side hyperresonant in front, excepting moderate dulness below fourth rib extending about 2 inches to left of mammillary line and downward to near border of ribs Posteriorly and laterally hyperresonance over upper two thirds of left side with tympanitic resonance below Right border of heart extends one inch to right of sternum on line of fourth rib Respiratory murmur at left apex about four fifths as intense as on right side extending down to third interspace in front and to seventh or eighth rib behind Below this, no respiratory sounds, but instead I heard several times, rumbling and gurgling exactly like that commonly heard over the bowels Occasionally I heard short metallic sounds which might be termed metallic tinkling, such as may often be heard over the bowels when a patient is flatulent These were not very much like the metallic tinkling I have often heard in pneumo hydrothorax, probably on account of being produced in small cavities with elastic walls I heard nothing resembling amphoric respiration and there was no succussion sound I made a tentative diagnosis of diaphragmatic hernia and planned to see the patient at his home the following day with Drs Christian Fenger and William M Harsha We called about 5 p m, the patient having eaten nothing since a very light luncheon 4 or 5 hours previously The signs were the same as on the previous evening excepting that the apex of the heart was crowded only about three fifths as far to the right The dulness to the left of the heart was less distinct, the respiratory sounds in front extended about an inch lower and behind two or three inches lower than the preceding evening and the gurgling sounds were heard much less frequently I understood Dr Fenger that he heard something like amphoric respiration over the lower part of the lung posteriorly but it did not occur while I was listening Dr Harsha was inclined to think the case one of pneumothorax, Dr Fenger was non committal I felt more confidence than before in my diagnosis We advised the patient to go to the Presbyterian Hospital hoping to establish the diagnosis and if necessary operate for relief In the hospital Dr Fenger explored the lower part of the left chest twice with a long aspirating needle, the first time with negative results The next time there was some escape of air sufficient to blow out a match This had no odor and the needle contained no cells or fluid that yielded anything to microscopic examination The patient was given bismuth and examined by the x ray but with negative results His stomach was filled with air and the colon with water and from percussion appeared to be in normal position While in the hospital he was examined by Drs Billings, Senn, Rhodes, Corwin, Herrick, Dolamore, Freer, Sippy, Torrison, Stevenson and others (about thirty in all), some of whom favored the diagnosis of pneumothorax and others agreed with me I examined the patient several times during the next few weeks hearing the intestinal sounds often and sometimes the long drawn out gurgle from rushing of air or fluid through a constricted portion On one occasion I heard something resembling a faint but very distant amphoric inspiratory murmur which I think must have been the same as the metallic breath sound from the bronchial tubes referred to by Leichtenstern The position of the heart and the lower line of respiratory murmur varied somewhat from time to time, but otherwise there were no changes in the physical signs or in the patient's general condition The diagnosis of diaphragmatic hernia appeared to me more and more probable with each examination, until finally on account of the patient's anxiety to be through with the trouble I felt justified in recommending an exploratory operation below the diaphragm providing Prof Fenger should concur The patient himself, though favoring the operation has thus far been unable to decide on account of the conflicting views as to the diagnosis I examined this patient again February 13 He told me that about three days previously, after laughing he could hear air rushing into some cavity below the left inframammary region I found the left side more tympanitic than ever before the impulse of the heart crowded

5 Walker International Jour of Surg, Sept 1900 p 257

two inches to the right of the sternum the respiratory sounds over the left apex extended down to about the fourth rib but were less distinct than previously and on a level with the inferior angle of the scapula on the left side posteriorly and laterally, amphoric sounds were constantly heard on inspiration though they lacked the amphoric echo and the nearness to the ear that are present in ordinary cases of pneumothorax The gurgling and borborygmi could not be detected at this time The left side measured 17¼ inches and the right 17 The movements of the left side were practically nil, the abdomen was somewhat retracted and the spleen could not be detected below the border of the ribs A week later there was no material change in the physical signs I examined the patient carefully Feb 27 nearly ten weeks after the accident During the whole time there has been no increase in temperature or pulse rate, excepting the slight change already mentioned which was present a day or two after one of the exploratory aspirations and which was attributed to a sore throat At the last examination the contour of the chest was normal, with the retraction instead of prominence of the intercostal spaces on the lateral aspect of the left side The abdomen was considerably retracted, the heart sounds were feeble when the patient lay upon his back, but the organ had returned two and a half inches nearer its normal position than it was two weeks previously When the patient lay upon the right side the heart sounds and impulse were of normal intensity over the lower portion of the sternum to the left of the median line The vesicular murmur could be heard over a larger area at the upper part of the left chest than at the last examination and was of about one third its normal intensity I was unable to hear anything resembling amphoric respiration, but whisper resonance was distinct though feeble over the lower half of the left side There was a small area of moderate dulness about two inches in diameter at the upper anterior corner of the infra axillary region which appeared to me due to the contents of the hernia but aside from this the lower part of the left side was moderately tympanitic and the upper part presented nearly normal though slightly exaggerated resonance I heard no metallic tinkling or borborygmi, but the patient called my attention to an interesting sign which I heard repeatedly as he swallowed a little water This was the normal though somewhat intensified liquid sound from the esophagus which could be heard only at the lower part of the esophagus below the level of the fourth rib It could be heard in front and laterally though most distinctly in the latter position This sound occurred as the bolus of water passed through the lower portion of the esophagus, it was followed by a silence of about ten seconds and then came another considerably louder and more prolonged gurgling sound which could be heard distinctly over the epigastrium and as high as the fourth rib The first of these sounds I think was produced by the passage of the water through the lower portion of the esophagus into the stomach and the second by passage of a part from the portion of the stomach that remains in the abdominal cavity to that portion that forms a part of the diaphragmatic hernia This patient has never had any history of stricture of the esophagus so there is no reason for suspecting that the liquid remains for ten seconds in a pouch at its lower part before it passes into the stomach indeed if it were from this cause the second sound would begin immediately after the first and would continue until the liquid had drained into the stomach It seems quite reasonable to suppose that it might require ten seconds before the movements of the stomach would force the liquid which had been taken in through the constriction into the hernia These sounds could be produced at will every time the patient took a small swallow of water

The points in favor of the different diagnoses in this case are shown in the following table

PNEUMO HYDROTHORAX HISTORY	DIAPHRAGMATIC HERNIA HISTORY	
1 Ninety per cent follow tuberculosis most of the remainder traumatic *Absent in this case*	1 About 27 per cent congenital or due to congenital defects The remainder traumatic Absence of usual causes of pneumothorax	
2 Usually sharp pain in side followed by depression and symptoms of hydro pneumothorax *Absent*	2 Usually but little pain and not very prominent signs in consequence of hydro pneumothorax *Absent*	
3 Usually feeble rapid pulse and persistent temperature *Absent*	3 Pulse and temperature never above normal excepting slightly for a few hours after the first aspiration at which time he had some sore throat	
4 Abdomen usually distended but may be normal	4 Abdomen retracted	
5 Restricted movements and hyperresonance on left side	5 Restricted movements and hyperresonance at upper part of left side Variable tympanitic resonance over lower part In pneumothorax tympanitic resonance should be most marked at apex unless prevented by old pleuritic adhesions No history of pleurisy at any time in this patient s life	
6 Commonly succussion sound or flatness showing fluid in pleural sac *Absent* Very rare cases have little or no fluid	6 No succussion sound or flatness though presence of gurgling and splashing sensations noticed by patient extending four or five inches above diaphragm showing presence of fluid in smaller cavity than the pleural sac	
7 Displacement of heart to right constant while air remains but gradually disappears as air is absorbed	7 Displacement of heart to right varying from time to time according to the contents of stomach and bowels from one to five inches to right of normal	
8 Spleen in left side d pneumothorax crowded downward *Absent*	8 Spleen not crowded downward	
9 Feeble or absent vesicular murmur	9 Feeble vesicular murmur over upper part of chest but at some examinations the murmur was three fourths as loud as on the right side over an area varying at different examinations from two fifths to three fifths of the left side The area over which it cannot be heard varies under the same conditions Absence of vesicular murmur below	
10 Amphoric respiration in many cases depending on whether opening into pleura from lung remains patent	10 Amphoric respiration though lacking the echo that is usually present in the pleural cavity present occasionally only in this case and heard only over the lower part of the chest and that in inspiration only In pneumothorax it is usually heard best in expiration and appears near the ear instead of distant as in this case Gurgling and borborygmi as high as the fourth rib from bowels and louder than below the diaphragm Sometimes long drawn out sounds from fluid or air passing through constriction Although intestinal sounds may sometimes be heard above the normal position it is doubtful whether they could ever be heard distinctly as high as the fourth rib unless the diaphragm were crowded far upward as after an old pleurisy In pneumothorax the diaphragm would be pushed downward	
11 So called metallic tinkling but it could not have been produced in the pleural cavity because it contained no fluid	11 So called metallic tinkling but of quite a different quality from that heard in pleura quality exactly like sounds often heard over abdomen Produced independently of respiratory movements or shaking the body There was no fluid in the pleural sac therefore metallic tinkling could not have been produced by pneumothorax in this case	
12 Dyspnea	12 Dyspnea should be permanent in pneumothorax It was intermittent in this case	
13 Aspiration Obtained air only No odor	13 Aspiration No fluid either from pleural cavity or intestines No odor from intestines This like the absence of bacilli from sputum is not a positive sign	

In this case the symptoms and signs noted in 5, 7, 9 10, 11 and 13, taken without modifying conditions would certainly indicate pneumothorax but the conditions in some of these seem to make them weigh more for diaphragmatic hernia and all of the other seven propositions certainly make strongly for the latter diagnosis

J B Murphy states that when deflating the lung by air in the pleural sac the air must be introduced about every third day It is improbable that confined air could remain in the pleural sac for this length of time Clinical experience has shown that in nearly all cases en-

trance of air from the air passages to the pleural sac is speedily followed by effusion It is extremely improbable that a communication of the pleural sac with the air passages could exist for this length of time without causing pleuritis

The diagnosis in this case seems to me nearly certain, the prognosis very doubtful, and the treatment problematical The fact that 27 per cent of the cases reported by Bowditch were in good health strongly favors doing nothing, but the comparative safety of an operation under modern precautions and by such surgeons as we have at hand seems to justify the attempt to prevent possible strangulation

The patient left the hospital a few days after the last examination and I have not seen him since, though I have heard that he is doing very well

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THE VALUE OF CALCIUM CARBID IN THE TREATMENT OF INOPERABLE CARCINOMA OF THE UTERUS *

I C CHASE A M, M D
Professor of Chemistry and Toxicology in the Medical Department of Fort Worth University
FORT WORTH, TEXAS

The treatment of carcinoma by calcium carbid dates from 1896 The late Dr J H Etheridge, of the Chicago Policlinic, following some German physician, first brought this treatment into notice in America He published the results of his experiments in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, in July, 1898, highly recommending the treatment Dr W B Coley, of New York, took up the subject and published a monograph in Vol 17 of the *Twentieth Century Practice of Medicine,* commending the treatment and presenting a flattering report of cases This article has been widely circulated Dr A H Cordier, of Kansas City, last year read a paper recommending the treatment before the Mississippi Valley Association at Asheville, N C Comments are continually appearing in the American medical press as well as brief reports from German and French periodicals The last editions of several standard text-books on gynecology have recommended the treatment

The first attempt at a real exposition of the exact action of calcium carbid was made by Dr Emil Ries before the Chicago Medical Society, and published in THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION in November, 1896 This paper deserved more general attention than it received

The growing widespread conviction of the value of calcium carbid seems to me a sufficient excuse to attempt to review carefully the theoretical and practical status of this treatment

The procedure usually advised in applying the carbid is, 1, the removal of all necrotic tissue by the curette, 2 hot irrigation, cleansing and drying the wound, 3, the insertion of one or two pieces of calcium carbid the size of the terminal phalanx of the thumb, 4, fixing the carbid in place by iodoform gauze packing, 5, the removal of the gauze between the second and fifth day, cleansing, drying and repeating the process

The various claims made by the advocates of this treatment are the following

1 Acetylene gas has a specific escharotic action on the carcinomatous tissue

2 Acetylene has an antiseptic action, inhibiting the bacteria of putrefaction and thus reducing odor

3 It transforms the necrotic area into a clean, contracting, granulating wound

4 Hemorrhage ceases or is greatly diminished

5 Wider experience shows its positive value

6 It gives the patient more comfort and postpones death

7 It is without danger

8 It is sometimes capable of producing a complete cure

Calcium carbid is a hard, grayish, stag-like mass, formed by the union of quicklime and coke at the high temperature of the electric furnace It emits a garlic like odor when in contact with the moisture of the atmosphere and crumbles to a grayish-white powder In contact with water it is violently disintegrated, liberating acetylene gas according to the formula $Ca\,C_2 + H_2O = Ca\,O + C_2H_2$

The commercial product varies and contains the impurities of the original materials Water liberates hydrogen sulphid and hydrogen phosphid in small quantities, to which the odor is due

Pure acetylene gas is a hydrocarbon having a faint ethereal odor When impure it has been considered highly poisonous The pure gas is but slightly toxic Cushney, in his admirable work on therapeutics, classifies it as one of the medicinal anesthetics of inferior value, dangerous because of its depressing action upon the heart

Water dissolves 1 1 times its volume of gas From my determinations, defibrinated blood dissolves but 3 of its own volume, which would be about the limit absorbed by the serum Rosemann has shown that acetylene forms no combination with hemoglobin, as has been frequently reported

A saturated solution, as well as the pure gas itself, has no apparent physiological effect when 5 c c are injected in the dorsal lymph space of the frog This I have proven repeatedly by experiment

The impure gas arising from the carbid in water has no effect upon the open eye long held exposed to its influence, as was pointed out by Ries I have been unable to notice any effect from a saturated aqueous solution of acetylene instilled into the eye

I have observed the movements of leucocytes in a warm solution of normal salt saturated with acetylene They do not seem to differ from normal I can not find that the motions of motile bacteria or vorticella in acetylene solutions seem to be impeded Rosemann exposed animals to streams of pure acetylene for several hours without fatal effects

It would seem from such considerations that Dr Etheridge was mistaken when he suggested that acetylene gas destroys cancer cells by annihilative action or by chemical change The similar article by Dr Coley in the *Twentieth Century Practice of Medicine* is likewise misleading I believe we are safe in assuming that for all practical purposes acetylene has no physiological action on protoplasm sufficient to give it therapeutic value in the treatment of carcinoma

Concerning the suggested bactericidal action of acetylene I find allusions to experiments by Professor Hektoen, of Rush Medical College, who is said to have grown several pathogenic bacteria with calcium carbid and acetylene gas with negative results I have carefully reviewed the work by a series of experiments, growing the micro-organisms in an atmosphere of commercial acetylene gas after the manner of the culture of the tetanus bacillus in nitrogen, using nutrient gelatin The

* Read before the Texas State Medical Association, Galveston, Texas, April 24, 1901

streptococcus, staphylococcus, bacillus pyocyaneus, various diplococci, proteus vulgaris and other bacilli of putrefaction, all grow luxuriantly in an atmosphere of acetylene, meat and bouillon likewise decompose rapidly Fresh urine decomposes as promptly as in the air

I conclude that acetylene gas has no antiseptic or bactericidal power sufficient to retard the decomposition of necrotic tissue or the infection of healthy tissue, and can play no part in the removal of the offensive odor of the uterine discharge

The second product resulting from the decomposition of calcium carbid is calcium oxid or quicklime This almost instantly becomes slaked by the moisture present The treatment of carcinoma by lime and other caustics is very old and there are on record reports of the application to the cervix of nearly every known caustic Beyond question the place of escharotics in the treatment of carcinoma uteri is a very limited one In case a caustic is desired it is pertinent to inquire whether calcium carbid is a rational selection

The action of all true alkalies is identical, depending upon their common hydroxyl ion The degree depends upon their solubility The alkaline hydrates, like caustic potash, are very soluble, they penetrate to considerable depth into the tissues, they neutralize all acidity, dissolve tissues by the formation of soluble alkali protoids, saponify fats, and withdraw fluid from the tissues for their dilution They are slowly neutralized and removed by the body of fluids and cause a deep necrotic area, whose base bleeds easily, due to the solvent action of the alkali upon the fibrin of the blood clots These agents have been given up in the treatment of the uterus because of the deep and dangerous sloughs and the tendency to hemorrhage

Calcium hydroxide has an identical action, save, as it is but slightly soluble, it penetrates only the superficial layers and has less affinity for the tissues So superficial is its action that the "cancer doctor," who uses it at all mixes it with caustic potash in the form of "Vienna paste" to increase its penetration It has the same tendency to dissolve fibrin and promoting rather than checking hemorrhage

Metallic salts depend for their chief action on their acid ion The action is the same as the action of their acid The degree of the action depends upon the avidity of the acid and the solubility of the salt They range in power from mild styptics to violent corrosives The acid ion forms acid albumins The limit of this action is more clearly marked than with the alkalies because of the neutralization of the acids at a definite level by the alkaline body fluids The metallic ion forms in most instances insoluble metallic albuminates, which assist likewise in limiting the action The base of the ulcer is hard and definite They do not so readily dissolve fibrin and have a styptic action in checking hemorrhage They can be selected in all degrees of strength to suit the extent of escharotic action desired, as in the series beginning with the mild alum, iron chlorid and lead acetate through mercuric nitrate, zinc chlorid to antimony chlorid, the last being rarely used

The only argument for a caustic over a curette is its ability to penetrate the tissues and destroy the deep carcinomatous cells of lessened vitality and poor blood supply The microscopical investigations of Ehler seem to demonstrate the contrary, that carcinomatous tissue is only superficially affected while necrosis of healthy tissue extends to a considerable depth

I draw from these considerations that a caustic is seldom indicated and then a rational selection would be a soluble metallic salt and not the carbid of calcium

The antiseptic action exerted by calcium carbid is due to the quicklime and to some extent by the heat liberated

The decomposition of calcium carbid is attended with the evolution of a large amount of heat A piece taken between moist fingers becomes too hot to hold An erythematous redness is frequently seen about the area where carbid is applied This is due partly to the inflammatory action of the caustic and partly to heat Patients sometimes complain of a burning sensation A piece of carbid the size of the terminal phalanx of the thumb weighs about 10 grams This will liberate 8 7 grams of quicklime and 200 cubic inches of acetylene gas The whole piece requires 5 6 c c or 1 5 drams of exuded serum for its entire decomposition This disintegration, as near as my experience can determine, usually requires from three to twenty-four hours, varying widely with the vascularity of the necrotic area I have measured the heat liberated in a calorimeter and find that from 10 grams about 4500 calories are set free, varying somewhat with the sample This is sufficient to raise 71 c c of water from body temperature to boiling, or enough to similarly melt 459 grams of lead There is no question but the heat liberated is quite sufficient to somewhat cauterize the tissues, especially when serous exudation and consequent decomposition is very rapid To this heat is undoubtedly due the marked contraction of the wound, and the lessened tendency of the caustic to produce hemorrhage It is very possible by the application of a large amount of calcium carbid in a thin vascular shell of a uterus to cause a slough producing perforation and fistula, hastening a fatal peritonitis or occluding the ureters, as other caustic agents are reported to have done Other dangers have been suggested, but are more theoretical than practical

The heat produced can never compare with the actual cautery which after thorough curettage probably to-day insures the best results in inoperable cases This fact has recently been emphasized at the last meeting of the AMERICAN MEDICAL ASSOCIATION by Dr Byrne, who reported the cicatricial scars of the actual cautery almost immune from carcinomatous invasion, and the roasting of the underlying tissues gives the largest immunity from extension The gratifying contraction of the ulcerated area is more prompt and marked with the cautery than with the heat of the carbid

The cases treated with calcium carbid that I have had under observation have run their usual typical courses The cleansing, curettage and calcium carbid have together prolonged the patients' lives and rendered their last days more endurable The results I can not see are in any respect superior to curetment antiseptic treatment, the use of the cautery and mild styptic and escharotic applications

I believe that both theoretical considerations and experience coincide in showing calcium carbid to be much overrated, of some danger, and doubtful utility, not so valuable as a better selected line of treatment suited to each individual case

It is to be greatly regretted that so many inaccurate statements concerning this agent are creeping into literature It is recommended in the last editions of several standard texts In Dr Garrigues' last edition of his "Gynecology," p 544, he says, speaking of uterine carcinoma "Calcium carbid is an important addition

to our palliative resources, which in cases that have not progressed too far may even effect a permanent cure" Cases that should receive "palliative" treatment are certainly inoperable How the application of calcium carbid can affect the deeply infiltrated extra-uterine carcinomatous masses in such cases is beyond the ken of human reason, and I believe has no ground in experience It is probable that in a case of incipient carcinoma of the cervix the neoplasm might be totally destroyed by a local caustic, but here calcium would be a poor selection and any palliative treatment would be unsafe to rely upon

Few statements could be more serious than those of Levet and Guinard in "Nouvelles Rémèdes," of 1898, reported in the medical press, in which they state that they have kept inoperable cases of uterine carcinoma in a "happy statu quo" by the application of calcium carbid every four to five days Such statements encourage tinkering and losing time on operable cases

In closing I will draw the following résumé of important conclusions

1 The mass of the literature on this subject is misleading

2 The originators of the treatment were ignorant of the real action of calcium carbid, and had insufficient clinical experience to pass judgment on its value

3 Acetylene has no effect on protoplasm sufficient to support a theory of any specific annihilative action on carcinomatous cells

4 Acetylene has no escharotic effect

5 Acetylene has no bactericidal action upon pathogenic bacteria or the bacteria of putrefaction

6 The principal action of calcium carbid results from liberated quicklime

7 Lime is not a rational caustic to select, if one is desired, because of its superficial action, the character of the necrosis and tendency to promote hemorrhage The metallic salts are more styptic, and their action may be better graduated by proper selection

8 The amount of heat evolved may be sufficient to slightly cauterize the tissues In most cases it has slight therapeutic effect save counteracting the tendency to hemorrhage and promoting contraction

9 The heat of the actual cautery promises better results because of the firmer cicatrices, resisting carcinomatous invasion and more complete contraction of the wound

10 Calcium carbid is open to the same dangers as other caustics when improperly or too zealously applied those of producing its corrosive action in the wrong place, fistulæ perforation and fatal peritonitis or occlusion of the ureters

11 The treatment does not reduce odor or hemorrhage nor give more comfort to the patients than other rational lines of treatment

12 The claims of advocates have not been realized in experience There is no evidence in theory or practice warranting the conclusion that calcium carbid could ever cure a case of really inoperable cancer of the uterus

13 The facts regarding the subject should be more widely disseminated to expurgate medical literature and to avoid false expectations and fatal delays in operable cases

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The Children's Exposition now open at Paris has a medical department, and one of the show cases contains the photographs taken in early childhood of various prominent physicians The historical exhibits of children in relation to the physician are artistic and interesting

MORPHINISM AN UNUSUAL CASE

WESLEY E TAYLOR, B S, M D
CLEVELAND OHIO

Some forty years ago, when Dr George B Wood's famous work on therapeutics appeared, he wrote concerning morphinism as follows "It will not answer to break off suddenly No fortitude is sufficient to support the consequent misery, and life might be sacrificed in the effort Of the particular phenomena which might result I have no experience, for I have met with no case in which the attempt has been made, or at any rate more than momentarily persevered in" This doubtless was the consensus of professional opinion at that time, and probably it remains substantially the same to-day From past instruction reinforced by a limited observation, it had seemed to me doubtful whether such a habit was ever thrown off by a patient unaided, under any circumstances How rarely a confirmed "morphin fiend" is cured by the most careful treatment, even in retreats, is well known to every practitioner *A priori* it would seem well-nigh impossible, therefore, that a cure, without aid should be effected in one who has become a slave to the drug

Such a case would seem to savor of the sensational, yet such a one recently came under my observation It is interesting largely on account of the unusual circumstances surrounding the inception and progress of the cure That the patient has abstained from opium since first putting it away, which was about nine months ago, there is now no doubt The case seemed so unusual that more than ordinary proof was required before accepting his statements It is only after an investigation of such thoroughness that deception seems to be beyond question or doubt that a report is offered

The patient in question was a laborer 45 years old, 5 feet 10 inches in height weighing 166 pounds, and in better health than for thirty years past He inherited a taste for alcohol and from boyhood used whisky to excess Since childhood he has suffered acutely at times with pain due to disease of the left shoulder-joint In 1884 he began to take a small amount of powdered opium daily to allay these pains Soon this was mixed with pulv glycyrrh comp in order to increase the bulk and thereby lessen the likelihood of mistake in dosage, as well as with the idea that it would diminish the tendency to constipation So persistent was his constipation that for years previous to the discontinuance of opium his bowels did not once move without an injection He avoided cathartics because of the quantity necessary for the desired effect He found powdered opium and licorice an inconvenient form for daily use, so he added enough glycerin to mould it into pills This answered all purposes of convenience thereafter Gradually the amount of the drug was increased until after a couple of years he was using 30 grains of powdered opium daily Becoming uneasy at this rate of increase he now made an effort to limit the amount He found, however, that he must continue to have between 20 and 30 grains a day This he took in three doses—one before each meal

All this time and for years before, he had been using whisky to great excess The amount taken daily was seldom less than from one to two quarts For five years he bought a gallon jug full on an average of every two or three days While the opium was taken in regular doses, the whisky was used at intervals throughout the day According to his statements the opium would counteract the effects of the alcohol Thus he could

use more whisky than before and still carry on his business as usual

The difference in the action of the two drugs was this Alcohol excited him more or less and caused unsteadiness of muscular action It failed to relieve pain or to lessen his mental troubles and worries in the least, but served rather to magnify them Opium, on the other hand relieved his pains and lessened his nervousness It minimized his troubles and furnished ready excuses for them It gave him rest and a happy, untroubled feeling generally No matter what happened it always seemed as if everything would come out right in the end His worst time was immediately after rising in the morning, when he felt weak and powerless After taking his customary pill this feeling rapidly vanished Gradually such excesses began to tell on him He lost weight appetite became poor and stomach acted badly

In 1888 he decided to quit using alcohol in any form and did quit, though he had an attack of delirium tremens which nearly proved fatal He clung to opium, but kept the amount down to 30 grains or less a day In the summer of 1900 he had a severe attack of "gallstone colic, which his opium, augmented by liberal amounts of morphin hypodermically by his physician, failed to relieve His sufferings here were so intense that following his recovery, he came to a firm resolve to abandon the drug How great a task he had laid out for himself he afterward declared was beyond conception The idea he had of it before the trial was that at most it would only be the quenching of a fire which would rapidly burn out as it failed of fuel He went to a physician and asked for some remedy which would cure him of the habit The physician not only said he could not furnish such a panacea, but gave him no encouragement and told him plainly that he could not rid himself of a habit so long established This discouragement only strengthened his resolve, and that night he did not take his accustomed pill That was about August 1, 1900, and since then he has not taken a single grain of any form of the drug His weight at that time and previously had been about 145 pounds, his appetite was poor—almost nothing—his bowels moved only with an injection, and in condition he was generally run down That night he did not find much trouble though he slept but little and was nervous and fretful The next day he felt weak and irritable and suffered from nervous symptoms Then pains set in and it would seem as if some one was pulling and pinching his nerves with forceps So intense were the twinges that he would jump and writhe with the pains As soon as he could get at a part to rub it, the pain would fly to another quarter, and by thus shifting would by spells almost drive him frantic At night such sensations were intolerable He could not get rest in any posture, to say nothing of securing sleep He would lie down tired and weak, and finding the bed uncomfortable get up in a few minutes and try the sofa This being no better he would then throw himself on the floor Worse than ever he would take a rocking-chair hoping that perhaps he could snatch a few moments sleep sitting up Then in the vain hope of so tiring himself that he would fall asleep from sheer exhaustion he would pace the floor by the hour Becoming wearied of the room and still unable to sleep he would walk the streets only to find himself as wakeful as ever If by chance he fell asleep for a moment it would be to awaken directly often with a scream to find himself wet with perspiration He had no visions nor delusions of any kind during this early period, save frequent attacks of night-mare, when he would awaken, covered with cold sweat, and filled with horror from dreaming that he had broken his vows and taken again of the drug

In spite of all this he took nothing in the way of drugs or medicine for his restlessness He had broken away of his own accord and not at the solicitation of friends or on the advice of any physician He did not quit gradually but stopped suddenly, and that, too, with his can on the table at the head of his bed where it continued to remain untouched for more than six months afterward, half full of opium

The only thing he found which would procure him any rest was to have his feet bathed in water as hot as it could be borne While this was continued he could get comfortable sleep For two weeks the best sleep obtained was while his feet were being bathed in this way And for the next four weeks he did not sleep to exceed two hours out of the twenty-four The one symptom most vividly remembered was the inability to obtain rest by all the means at his command, and this, coupled with extreme weakness and depression, seemed more than all else to unfit him for resistance The twitchings and nervous symptoms, the pain and even the longings for opium he said could be more easily endured than the feeling of extreme prostration attended with inability to obtain physical rest Sometimes he would go out in his garden with a hoe in order to occupy his thoughts, but nervousness so disqualified him from applying his mind to the work that he would be obliged to stop And this led to the fear, which haunted him day and night, that he would lose his mind

At the end of the first six weeks he began to feel stronger and to observe that he was able to get some rest He could now begin to secure some natural sleep, and at this point felt that the battle was won The period just after rising before breakfast, still continued to be met with dread At that time a feeling of dejection would almost overcome him, but would in a great measure disappear after breakfast His appetite had begun to increase almost from the time he weaned himself from opium, and was now remarkably good His weight likewise was on the increase The bowels were moving normally, and had come around of their own accord, without physic from a condition where they had not moved for years without injections to one of daily regularity The complexion also, from a sallow, muddy color, changed to a healthy and almost ruddy hue and his lusterless and apathetic eye took on a more natural appearance, so that his friends remarked on his improved condition After the lapse of three months he felt perfectly cured and weighed 166 pounds, which is his weight to-day, and the only symptom then remaining was a feeling of languor on arising and lasting until breakfast This symptom has not even yet entirely disappeared Since his abrupt breaking off last August he has not taken opium in any form and does not now crave it His half-filled opium can sits before me now—a silent testimonial of what can be accomplished by mere will-power alone

Samples of his urine have been repeatedly tested for the opium reaction by Hausemann's and other tests with negative results This was done to insure against fraud and should in itself be a proof of abstinence In view of all this as well as the man's straight-forward story, his generally improved condition and the time which has elapsed since his discontinuance of it it

would seem that one is justified in considering this to be an accomplished cure

The amount of opium taken daily in this case was not phenomenal—most physicians can point at once to cases where larger quantities are consumed The patient, however, had been a slave to it for such a long period—sixteen years—that the habit had become fixed, and quantity then becomes a minor consideration The habit was certainly as well established and as deeply rooted as if he had used much larger amounts for a shorter period of time

If a man can accomplish such a cure *alone*, beginning suddenly with no encouragement and without great stimulus, why should not others desirous of ridding themselves of the habit be cured more easily, in the majority of cases, by an immediate discontinuance of the drug, especially if they have the moral support and the aid of sedatives at the command of a competent physician? This is not meant to advocate a sudden withdrawal of the drug in all cases Many patients might not be physically strong enough, though having sufficient mental fortitude to undergo the ordeal What is meant is that it might be advisable to break away from the rule, inflexibly clung to by many physicians, of a gradual diminution of dose If a patient is not taking doses of unusual size, if there are not great demands—as extreme pain—for the drug, and lastly if the physical condition and powers of resistance are not too much enfeebled, why not stop the narcotic at once and use all energy to resist it instead of drawing out the agony over months instead of weeks? In other words, why not put some of the burden on the physical instead of all on the mental resistance? Would not the chances of success be better in many cases to have a strong temptation to meet for a short time than a lesser temptation for a long period?

SPASM OF THE GLOTTIS AND ESOPHAGUS IN ADULT LIFE

A REPORT OF TWO CASES

L D BROSE M D, PH D
OCULIST AND AURIST, ST MARY'S HOSPITAL
EVANSVILLE, IND

Disturbance of function in the motor nerves supplying the upper air-passages and the upper alimentary tract is manifested not infrequently by the sudden onset of symptoms that produce great alarm and distress to the patient

The first case is that of H C, aged 54 years and married, who consulted me May 13, 1900, because of an attack of dyspnea that came on about 3 a m and just as he awakened from a sound sleep This difficulty in breathing was attended by spasmodic crowing inspirations, with great mental distress and anxiety, and after the attack passed off, which was in several minutes, he felt weak and so miserable that the following day he lacked ambition enough to go to his work, that of cashier in a bank An examination of his throat by direct inspection and with the laryngoscope disclosed nothing abnormal, notwithstanding his referring all of his trouble to the larynx His pulse was 105, breathing a little labored, tongue covered with a heavy, yellowish-white coating, breath markedly offensive, bowels constipated, skin relaxed and moistened with a cold perspiration and of a sallow color The urine was free from albumin and sugar The heart and lungs were sound, nor did I detect a lesion in the other viscera He denied venereal infection and stated that his family doctor had been treating him more than two months for these spells, without success He attributed his affliction to having slept with his son while he had the whooping-cough However, this act was not followed by cough nor did his dyspnea come on with any regularity

Most of the attacks occurred between midnight and 4 o'clock in the morning, arousing him from sound sleep, still he had attacks after rising in the morning and as late as 8 o'clock Sometimes he would go two weeks without a spell, and again he might have several in one week Their duration as a rule was from a few seconds to one or two minutes

He was a fleshy man with flabby muscles, a temperate drinker and smoker, but a good hearty eater, with little inclination for exercise, using the electric-car much of the time to and from business He had buried one wife, then met business reverses, but later happily married and again prosperous He was given a laxative pill at bed time containing blue mass and colocynth and heroin and salicylate of soda three times daily In the next ten days he had two more attacks, quite mild in comparison to the one at the time he first consulted me Upon my recommendation he gave up business and took a prolonged vacation The attacks of dyspnea, however, continued to recur, steadily grew more severe, and finally symptoms of dysphagia set in with unmistakable evidence of carcinoma involving the lower end of the esophagus and stomach Death occurred on the night of November 2, and Dr E Linthicum, who conducted the autopsy reports that the lower end of the esophagus and stomach were the seat of a primary carcinoma, with extensive secondary deposits in the left lobe of the liver

The second patient, M S, 31 years old and married, was referred to me by Dr E Linthicum, Feb 6, 1900, because of an acute attack of dysphagia He came to my office during the noon hour, in great distress, and said that while at dinner he suddenly found himself unable to swallow Upon offering him some water and requesting that he swallow it the liquid was retained a moment and then forcibly expelled through the nose and mouth with a gurgling throat sound Direct inspection of the mouth and throat as well as careful examination with the laryngoscope did not reveal a cause for the trouble relief for which was obtained after five minutes' inhalation of a compound cocain mixture in the globe nebulizer

The patient stated that he had his first attack of inability to swallow some thirty days before, but it lasted only a few moments and did not alarm him much After that he had a number of such spells, usually when eating in a hurry, a bolus of food lodging momentarily in the throat, after which it was swallowed with difficulty

He was a spare, nervous individual, an overseer in a large cigar factory His person had a very strong odor of tobacco, but he assured me that he only smoked two or three cigars a day The attack for which he consulted me was by far the most severe of any he had had, and lasted over half an hour He was given bromid of potash with tincture of cannabis indica, three times daily and a little local treatment for an existing simple naso-pharyngeal catarrh During the two weeks he remained under observation he had two or three more comparatively mild attacks of momentary duration, when he ceased visiting me because satisfied with his condition A few months later Dr Linthicum detected positive evidence of tubercular involvement of the upper lobe of the left lung, for which he sent him to Colorado

While the great majority of cases of spasm of the

larynx and esophagus bear a close relation to hysteria or neurasthenia, yet the possibility of the symptoms being due to pressure on the recurrent laryngeal and esophageal nerves should always be borne in mind, and a diagnosis not arrived at until such pressure has been most carefully excluded

MAGNETIC FOREIGN BODIES IN THE EYE

E VILLIERS APPLEBY, M D
Clinical Instructor of Ophthalmology University of Minnesota
Member of the Berlin Ophthalmological Society
ST PAUL, MINN

The class of patients with whom we have to deal in our subject may be said to belong for the most part to laborers or mechanics, whose daily occupation requires that they strike steel upon steel or steel upon iron as the case may be

We may speak of steel or iron interchangeably Either causes deflection of the magnetic needle, each can be located by means of the Rontgen rays, both are attracted by the magnet, and the one is as destructive as the other

Small particles of iron or steel are occasionally found loose in the conjunctival sac When seen there they have usually first struck and probably loosely imbedded themselves in the cornea or bulbar conjunctiva and afterward become dislodged They are then principally found just under and a little above the margin of the upper lid and are naturally easily removed

Fig 1 Shows the Hirschberg Sideroscope

Small chips of iron or steel are frequently found imbedded in the cornea—they then cause considerable pain, lacrimation and photophobia If located in the horizontal meridian or a little below it the degree of pain may be lessened by the patient's constant effort to limit the act of nictation thus keeping the eye open as much as possible, thereby diminishing the amount of irritation caused when the lids are in contact with the foreign substance Such particles of iron may be overlooked by the patient or his friends If left alone they rust and cause more or less infiltration and frequently are the seat of infection We are enabled to detect them in good daylight or by means of focal illumination —still more definitely by the use of a corneal magnifier If loosely imbedded, we may use a probe around which is wrapped a piece of absorbent cotton, moistening it and wiping the foreign body off If firmly imbedded, the cornea should be anesthetized either with cocain or holocain the eye steadied with the fingers and under good illumination the foreign body removed with a spud or gouge made for that purpose Or we may loosen the particle and apply a strong magnet If rust is present it is well to remove as much of it as possible

If the foreign body is deeply located in the tissues of the cornea, we should if necessary, cut the overlying portion with a small cataract knife and then apply a strong electromagnet In this way we lessen the possibility of further injury to the cornea or of having a sharp piece of iron penetrate into the anterior chamber during the process of removal

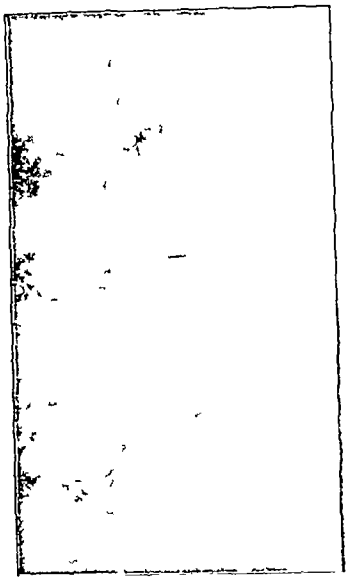

Fig 2 —(Reduced)—Skiagraph showing foreign body located between the two pieces of fuse wire

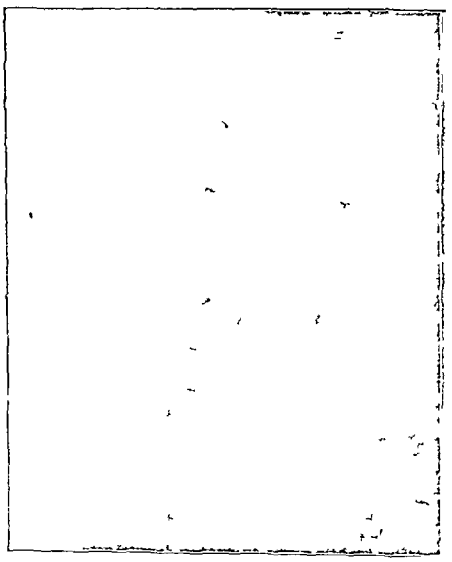

Fig 3 —(Reduced)—Skiagraph showing foreign body between the four fuse wire landmarks When held at a distance of half a meter the contrast is best

The importance of strict asepsis in all cases can not be over-estimated If infection is already present, we should use an antiseptic and then irrigate with an aseptic or mildly antiseptic solution If much irritation is present instill atropin and apply a pressure bandage

Small sharp pieces of iron are occasionally found imbedded in the sclera Owing to its elasticity and density, it, in many cases resists the impelling force of the foreign body sufficiently to prevent penetration, or, on the contrary, it is entirely penetrated by it It is

as a rule easy to locate and remove these pieces of iron from the sclera

Before considering the more complicated subject of injuries due to penetration by, and retention of, the magnetic body, we will speak of the history and diagnosis of such cases The patient perchance, tells us that he has been working with hammer and chisel, and that upon striking a blow something hit him in the eye Occasionally bystanders are the recipients of small pieces of steel in the eye Many times patients try to assure us that nothing has penetrated the globe They complain often of having only comparatively slight pain, of photophobia, lacrimation together with more or less diminution of vision We may find only a linear scar, the edges of which are already in apposition

After examining the eye well in good daylight, we determine approximately the amount of visual acuity —field of vision—then examine under focal illumination and with the ophthalmoscope Next in order is the sideroscopic examination The value of the sideroscope in determining the presence of iron in the eye, and too, its approximate location, is much underrated Dr Thomas Pooly of New York was the first to use the compass needle in determining the presence of iron in the eye All sideroscopes have been modifications of his In 1894 Asmus devised one which has been successfully used up to the present time, but as it is somewhat complicated in construction it requires the services of a good assistant for its successful employment I have seen Professor Hirschberg get brilliant results with this instrument of Asmus's, and two years ago it was my pleasure to see him demonstrate, before the Berlin Ophthalmological Society, a sideroscope designed by himself Its mechanism is simple and it gives excellent results In structure it consists of wood, brass and glass There are two substantial wooden brackets which should be firmly attached to a solid wall running north and south, or nearly so Upon the upper bracket is an adjustable upright standard, the upper part of which consists of a glass tube In the middle of the standard is an oblong chamber of brass on each end of which is fastened a small glass capsule In the upright tube is a fine brass thread attached above to a revolving screw On the end of the thread hangs a magnetic needle, upon the middle of which is fixed a small mirror Upon the lower bracket swings a standard, bearing a lamp, rays from which pass through a strong lens on to the mirror of the swinging needle A graduated scale is placed in position and the lamp so adjusted that the reflected rays fall upon a graduated screen

Fig 4 —Shows the Haab Magnet, as used when the patient is in the sitting posture

For convenience of expression we may divide the eye vertically and horizontally thus giving us four quadrants, an upper and lower nasal and an upper and lower temporal quadrant Cut No 1 shows the glass rod—within which is balanced a magnetic needle—as being almost in contact with the eye at about the junction of the lower and middle third of its lower nasal quadrant, 7 mm from the sclerocorneal junction Here we find the needle gives the greatest reaction which as the indicator shows upon the screen, measures 4 degrees If we get little or no reaction of the needle when applied to an eye in which we have good reason to believe iron is present we should bring the patient's eye into the field of a strong electromagnet This magnetizes the retained iron and consequently results in

its giving a better reaction when the eye is again brought into the field of the needle

In no case should we undertake an extraction nor should we even cause dislodgment of a chip of iron until we have if possible determined its location and relative size In order to do so it will frequently be necessary to utilize the Rontgen rays The first foreign body removed successfully after location with Rontgen rays was reported by Williams[1] De Schweinitz, Hansell, Sweet Oliver, Percy, Friedenberg and others have since reported favorable cases

In order to obtain good results in x-ray work,[2] the head and eye of the patient must be kept motionless during exposure This is best accomplished by having the patient lie upon a table designed for that purpose The eye should be kept closed Knowing that the rays travel in straight lines, we endeavor to place the tube and plate in such a position that we get a bitemporal skiagraph and also one taken in a fronto-occipital direction

Before making an exposure in the bitemporal direction, four pieces of fuse wire, each 6 mm in length are placed—and held in position by means of ordinary court-plaster—over the temporal region of the eye so that the enclosure represented between their inner ends corresponds to an area a little larger than that corresponding to the lateral area of the eye These pieces of fuse wire show distinctly on the plate after development

If there be upon the plate more than the four regular outlines of the wire we know we have a foreign body, and, moreover, we know its approximate size, location and shape as seen from this direction We may still better locate it by placing a piece of paper cut exactly the size of the normal eye upon the plate between the four artificial landmarks, and mark upon it the location of the foreign body Then, in turn, we place the paper over the area between the landmarks upon the patient, then designate the location of the foreign body by means of an aniline pencil

In the anteroposterior exposure two pieces of wire may be used They are placed, one upon the upper the other upon the lower lid in such a manner as to represent the diameter of the eye from above downward Comparisons are in like manner made here as before

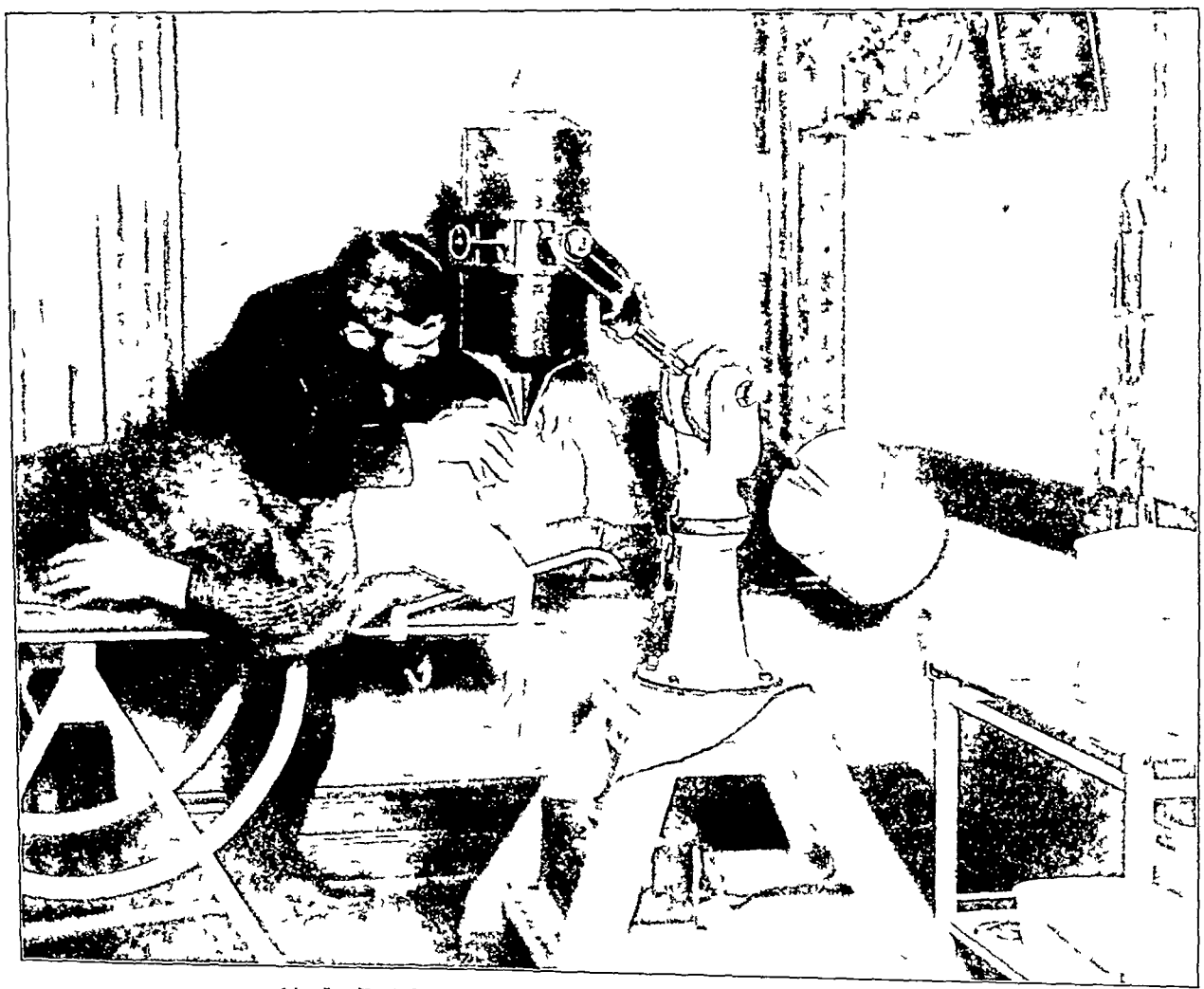

Fig 5—Haab Magnet as used when the patient is in the recum bent position

We now come to the subject of the extraction of the magnetic body The use of the magnet in surgery of the eye was first recorded about 250 years ago, when Wm Fabry, a German, removed a small piece of iron from the cornea by means of a lodestone (1656) It is a little over half a century (1842) since Meyer also a German removed through the wound of the sclera a piece of iron from the vitreous, using a thirty-pound magnet About a quarter of a century later McKeown, of Belfast made the first recorded equatorial incision

1 Trans of Am Ophthal Soc vol II p 708

2 I am much indebted to Dr Harold Sneve for aiding me in my efforts to obtain good radiographs

(1874) for the removal of a piece of iron from the vitreous, which he accomplished by means of a magnetized rod of iron—the so-called permanent magnet In 1877 Hirschberg perfected his electromagnet, and two years later operated successfully with it on a difficult case, making the first recorded meridional incision

In 1894 Haab, of Zurich, constructed a giant magnet on the principles of the one used by Meyer in 1842 So many good descriptions of the magnet have been published that I shall here say but little regarding its structure It consists of a cylinder of soft iron, around which is wound many layers of insulated copper wire There is a cut-off switch fastened to the wall, also a resistance box at its base, with a number of steps which allow the gradual admission of the current thus enabling an assistant to regulate the amount of force required by the operator Meyrowitz has mounted the Haab magnet so that it may easily be moved in practically any direction

I find that when in the recumbent position, the patient is often under much better control This applies particularly to those cases in which the amount of traumatism is great

The Hirschberg magnet consists of a soft bar of iron around which is wound a coil of fine insulated wire It is a hand magnet provided with a number of variously shaped points of different sizes It can be connected to a series of dry cells or to a zinc carbon element, and will support as high as 500 grams It should be used in conjunction with the Haab What the one will not accomplish, the other, in a large majority of cases, will

Knowing the position of a foreign body lodged in the interior of the eye, we elect as to whether we shall remove it through the tract of entrance, draw it by means of a large magnet into the anterior chamber and afterward through a corneal section, remove it with the small point of the Hirschberg magnet, or we may decide that a meridional or an equatorial incision is preferable In each instance it is our aim to remove the iron by such a method that it will result in the least injury to the eye

The Haab magnet is and has been much used as an important factor in diagnosis When used for that purpose the head of the patient is brought gradually toward the pole of the magnet If pain be then present or increased we know that the foreign body has impinged upon the tissues, finally, if after we have turned on the full force of the current, we get no pain nor increase of pain, we reverse the current and apply the magnet to the eye so that its power-lines shall have had effect from all directions, and then if the patient complains of no pain, we infer either that there is no magnetic body present or else that it is too firmly imbedded to be affected by the magnet

The magnet as a diagnostic instrument should be applied only after all other means have failed to show the presence of iron or steel in the eye It is of the greatest importance that the patient be seen as soon after the injury as possible

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British vs Boer Eyesight—In an address before the Society of Arts, in London, Mr B Carter according to *The Lancet*, referred to the statement often made in the daily press, that the average vision of the Boers is superior to that of the British soldiery He said that the Englishman, being accustomed to town life, does not allow for the purity and transparency of the air of South Africa and accordingly misjudges distances

THE IMPORTANCE OF INSTRUCTION IN MEDICAL SCHOOLS UPON THE MODIFICATION OF MILK FOR PRESCRIPTION FEEDING

ANDREW H WHITRIDGE MD
BALTIMORE MD

During the last fifteen years we have noticed a great change pass over the question of infant feeding, both in the minds of the laity and of the members of our profession We have seen a few aspects of this question change from hazy uncertainty into a phase of enlightenment This change has been as remarkable as it is encouraging to the profession For example, it is conceded that the feeding of infants should be wholly under the control of the physician Just as the midwife has been superseded by the obstetrician, the ignorant nurse or untrained mother must be superseded by the trained and qualified physician This position is held by the intelligent layman quite as firmly as it ought to be held by the educated physician That it is very frequently more firmly maintained by the patient than by his physician is largely due to those medical schools which have neglected to prepare physicians for this important and remunerative work A large part of the mortality of infancy is traceable to the lack of importance given to the subject of scientific feeding in the schools

It is also conceded that in the absence of the proper breast milk some modification of animal milk should be employed as a substitute, and that cows' milk should form the basis of all scientific infant feeding From this position there is now no deviation Specialists differ as to the forms of modification, as to percentages and proportions, as to diluents and other matters of detail, but none differ from the general proposition stated above However, scientific substitute feeding requires an intimate knowledge of milk, of breast milk as the primary example, and of modified cows' milk as the practical copy It is not the fault of the average physician that this subject is to him often a *terra incognita* It is mostly the failure of the medical school to lay the suitable foundation for this experimental knowledge It is conceded that the modification of milk for infant feeding is a very simple thing of itself Yet it is often regarded as a mystery and a snare in medical practice The schools might make its complete study one of the simplest as well as one of the surest means of practical medical education In our medical schools of the South there are no means by which the students or the post-graduate physician can obtain the training necessary to enable him to conduct thoroughly scientific infant or invalid feeding Students in some of our Northern schools of medicine have opportunities to become more or less familiar with this branch of medicine, but in the South they have no such opportunities These should be supplieded and I here make an earnest appeal that medical schools throughout this country obtain qualified men who will devote their time and energy to the teaching of this great subject Since summer diarrhea is such a factor in our mortality I suggest that at least during the summer months such of our schools as maintain a high standard of education should appoint qualified men who shall lecture by regular weekly lectures to students and post-graduate physicians, in the practical knowledge needed to understand this branch of our work It would be an inestimable gain to earnest men to have such knowledge of the cow, her milk, its care, and the bacteriologic relation of such matters to the employment of milk for infant

feeding imparted by a competent instructor If such a chair were founded in our schools, for example, and a proper man found to fill it, we should realize that advance had been made in pediatrics

The milk laboratories that have been established in many cities of the United States have done much to further the scientific feeding of infants Those physicians who employ these laboratories most largely speak most strongly of the results obtained My own experience in the use of milk modified according to my prescriptions, at the laboratories, has been so satisfactory that I can not praise this method too highly, and I should like to see a milk laboratory within the reach of all physicians who have infants to feed artificially This, however, is impossible, and at best only a percentage of physicians can reach the laboratories with their prescriptions But all physicians intending to devote themselves either to general medicine or to the special work of pediatrics should be permitted and encouraged to lay a solid foundation for this work while they are in the medical school Therefore, I hope my appeal for special instruction in feeding of infants will not be made in vain

A NEW PROCTOSCOPE AND SIGMOIDOSCOPE

WILLIAM M BEACH, A M, M D
Secretary of the American Proctologic Society
PITTSBURG, PA

This new instrument differs from the ordinary rectal tube in that it contains an illuminating attachment

Figure 3

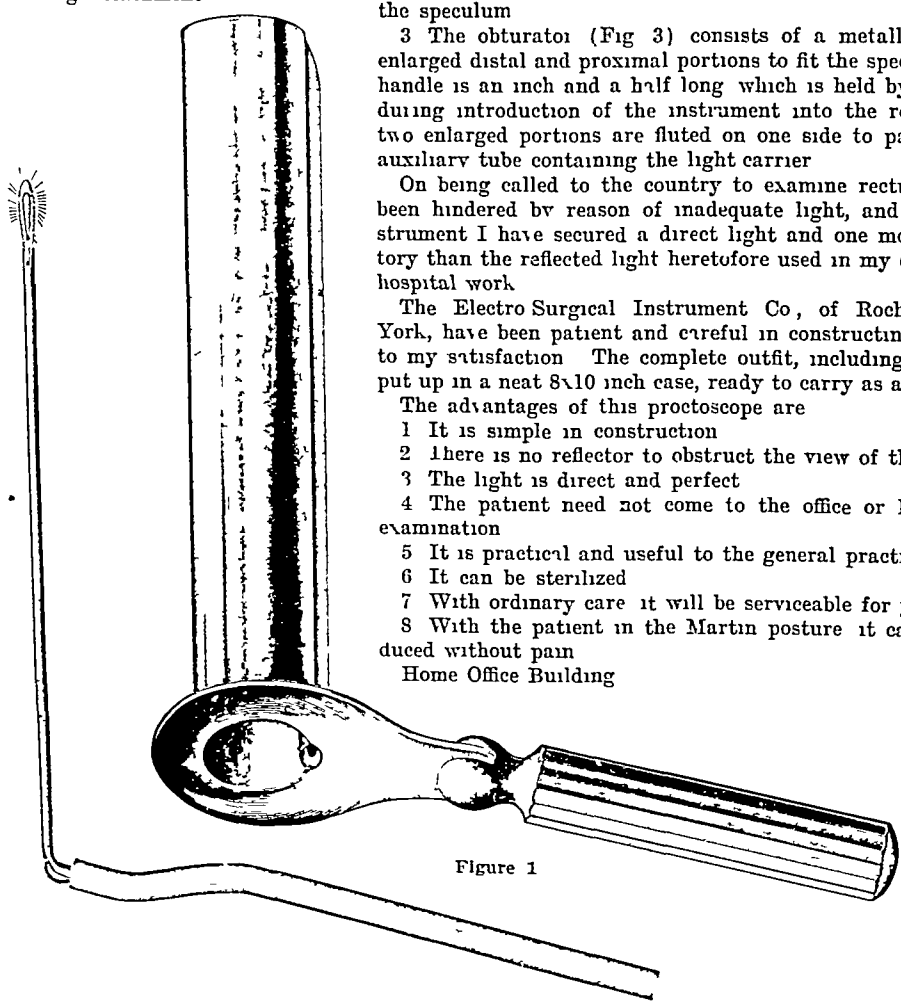

Figure 1

Figure 2

The apparatus complete consists of the metallic tube, a metallic light carrier and a metal obturator

1 The tube (Fig 1) varies in length from an inch and a half (the anoscope) to eight inches Though any length can be made, the set usually contains three sizes 1, the anoscope, one and a half inches long, 2, the proctoscope, four inches long, and 3 the sigmoidoscope, eight inches long For diagnostic purposes, the caliber is seven eighths of an inch, for operative purposes, as valvotomy or removal of high up polypus, the caliber is one and one fifth inches, the same as in Martin's set The handle is round and corrugated, and placed at the usual angle with the axis of the tube In the wall of the tube on the side of the handle is an auxiliary tube projecting both within and without the speculum to receive the light carrier (Fig 2), it is so constructed that the diameter of the speculum is not appreciably enlarged or the caliber lessened The auxiliary tube is lined with cement, holding in place a specially prepared glass which serves as a window at the distal end of the speculum This glass can be subject to high temperature, so that the instrument can be sterilized with impunity The glass window protects the incandescent light from any mucus, blood or other material that may be present in the ballooned rectum

2 The light carrier consists of a very light tube with a four candle power incandescent lamp on the distal extremity, properly wired, and made to conform with the shape of the speculum, when placed in the auxiliary tube The proximal extremity receives the wires from a dry cell battery, the source of light The handle is covered by rubber tubing to protect the wires, and is clamped to the upper border of the handle of the speculum

3 The obturator (Fig 3) consists of a metallic rod with enlarged distal and proximal portions to fit the speculum The handle is an inch and a half long which is held by the thumb during introduction of the instrument into the rectum The two enlarged portions are fluted on one side to pass over the auxiliary tube containing the light carrier

On being called to the country to examine rectums, I have been hindered by reason of inadequate light, and in this instrument I have secured a direct light and one more satisfactory than the reflected light heretofore used in my office and in hospital work

The Electro Surgical Instrument Co, of Rochester, New York, have been patient and careful in constructing the outfit to my satisfaction The complete outfit, including battery, is put up in a neat 8x10 inch case, ready to carry as a satchel

The advantages of this proctoscope are

1 It is simple in construction
2 There is no reflector to obstruct the view of the operator
3 The light is direct and perfect
4 The patient need not come to the office or hospital for examination
5 It is practical and useful to the general practitioner
6 It can be sterilized
7 With ordinary care it will be serviceable for years
8 With the patient in the Martin posture it can be introduced without pain

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THE PARASITES OF CANCER AGAIN DISCOVERED

Last year Max Schueller, of Berlin, in a preliminary report[1] described certain organisms, probably of animal nature which he by original methods had succeeded in cultivating from human carcinoma and sarcoma The complete report is now at hand[2] in the form of a monograph of 128 pages with numerous illustrations One might fear that these numerous discoveries of the cause of cancer—Sjobring, Eisen Gaylord, Max Schueller all describe animal parasites as the cause—would lead to complicated questions as to priority Fortunately, or rather unfortunately the differences in the descriptions of the various authors are so great that there is little likelihood of any troubles on this score Schueller makes an earnest effort to avoid the subjectiveness that unfortunately has characterized some of the publications of enthusiastic investigators into the hidden problems of the cause of malignant tumors, and practically the whole of the book is taken up with a detailed statement of the results of his studies Recognizing at the outset the futility of attempting to solve the question by purely histologic methods, he set about to discover some way in which the organisms, which he felt sure are present in these tumors, could be grown in pure culture Successful pure cultures are described as being quite easily obtainable by keeping absolutely uncontaminated pieces of malignant tumors in small, air-tight glass vessels protected from light and at the temperature of the body A prerequisite for successful growths is continuous maintenance of the pieces at bodily temperature from the very moment they are removed from the body of the patient The tissue of the tumor itself thus constitutes the nutrient substratum, and as the parasites already present in the medium begin to grow the cells of the substratum are destroyed or consumed and replaced by multiplying organisms Small, fine granules, clumps or drops soon appear in the vicinity of the piece and tissue, consisting of rounded or oval bodies of golden-yellow or brownish color, three times or more the size of a red blood-cell They have a thin, doubly contoured wall or capsule, which seems to be provided with numberless pores through which mobile protoplasmic processes may pass out, especially in young vigorous forms The presence of a nucleus is mentioned Sometimes three to four and more globular formations are seen within the capsules, and these are regarded as stages in the development of young organisms "Cultures" such as those here referred to are free from saprophytic and other bacteria, there is no putrefactive odor emitted, the odor present being described as characteristic and as different for carcinoma and sarcoma, the organisms from which also present some differences in their appearances The pores and the mobile, thread-like protoplasmic processes, which emerge from them, are described as subservient to nutrition The organism as a whole has a minimal degree of motion and is exceedingly sensitive to all kinds of disturbing influences Satisfactory methods for subculture have not yet been devised, and the complete biology of the parasites consequently has not been worked out The color appears to be due to an iron-containing pigment

Schueller claims to have obtained similar yet not fully identical, organisms from the lesions of syphilis[3]

In tumors, organisms are found in flesh tissues if examined immediately after removal Having studied the parasites in cultures, and consequently knowing what to look for in histologic preparations of dead tissue, Schueller found that they are best demonstrable by teasing pieces in alcohol and cleaning with oil of bergamot or some similar ethereal oil Celloidin sections may also be used Momentary staining with alum hematoxylin may be helpful in bringing out details in the tissue, the parasites remaining unstained and easily recognized by their yellow or brownish color Good results have been secured by means of Mallory's thionin and oxalic stain for ameba coli, the small forms of the parasites staining red In the tissues Schueller finds large empty capsules and young forms in great numbers, and in such relations to the cells that he draws the inference that the parasites certainly exercise a "formative stimulus" upon the cells Often parasites are found in masses in the tissues situated either in a finely meshed network or in canals or tunnels In glandular metastases of carcinoma he finds numerous parasites, especially at the margins of the carcinomatous nodules, so that it may be assumed either that cells and parasites are transported to the glands the cells continuing to proliferate under the influence of the parasites, or that carcinoma cells originate *de novo* from the pre-existing cells of the glands, according to the theory of Virchow, now long since abandoned Schueller, however finds not a little in support of Virchow's theory, but he does not assume a definite standpoint In many tumors Schueller finds appearances that indicate the entrance of the parasites into the tissues from without, and upon this basis he discusses, somewhat in detail, the prophylaxis of tumors This assumption presupposes a form or forms of the parasites less sensitive to differences in temperature and other influences than those he finds in the tissues of tumors but no facts

1 Centralbl f Bakt, Abth I, 1900, xxvii, 129 140

2 Die Parasiten im Krebs und Sarkom des Menschen Von Prof Dr Max Schueller, Berlin Jena, 1901

3 Centralbl f Bakt Abth I, 1900 xxvii, 516

are given to throw any light upon this phase of the matter

The animal experiments are given somewhat briefly and without definite details as to the manner of inoculation symptoms duration of life etc Lesions such as necrosis inflammatory changes and carcinomatous and sarcomatous proliferations are described as resulting from inoculations with the cultures mentioned in the foregoing Mixed carcinomatous-like and sarcomatoid growth was observed in the spleen after inoculation with organisms from human carcinoma Epithelial pearls may form in proliferations of the tubular epithelium of the kidney and of the intestines following inoculations—certainly an anomalous finding because as far as we know pearls occur only in squamous-celled carcinoma Typical squamous-celled or cylindrical carcinomas do not appear to have been produced experimentally The proliferations described may well have been altogether of a granulomatous character, and we are not told whether the rabbits experimented upon, as a rule died spontaneously or not Perhaps if they had been allowed to live longer the new proliferations would have subsided and faded away When we are compelled to say that Schueller has not proved that his organisms produce carcinoma or sarcoma when injected into animals, it means that as a matter of fact the cause of malignant tumors is still unknown

The biologic nature of the peculiar structures described by Schueller and designated by him as parasites, is not at all clear He states that the best zoologic and botanic authorities of the University of Berlin have declared themselves ignorant upon this point Schueller believes that they are lowly forms of animal life, but not protozoa Without personal observations and further studies by others it would be useless to speculate as to the nature of the yellow or brown iron-containing bodies that he has worked with The suggestion will surely be made that they are in part at least altered red corpuscles and derivatives therefrom

Nowhere in the monograph is it stated that the so-called cancer parasites occur freely in the blood of carcinomatous or sarcomatous patients In Gaylord's overflowing announcement in regard to the protozoa of cancer the parasites are said to occur freely in the blood It is clearly the duty of physicians and surgeons to not allow long established doctrines, such as the purely local nature of carcinoma in its early stages and its possible permanent curability at that time to be overthrown or modified in the slightest by premature and unsupported statements of sincere but overzealous investigators into the etiology of cancer Great harm would result were the impression to grow that cancer is a blood disease sure to break out somewhere else if removed

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Surgeon-General J Jameson director-general of the British Army Medical Service has relinquished his duties and retired to private life

THE ETIOLOGY OF VALVULAR DISEASE OF THE HEART

Acute articular rheumatism is in reality so common a cause of endocarditis and consecutive valvular disease, and so much importance has been attached to it as an etiological factor in this connection that there has been a tendency to overlook or ignore or minimize the part played by other morbid influences Whether the inflammation of the endocardium be due to the lodgment of the, as yet undemonstrated, bacteria of rheumatism or to the irritative activity of the toxins to which they give rise, it would seem likely from *a priori* reasoning that a similar disturbance might arise in connection with any of the infectious diseases, and that this is really a condition and not a theory there is not wanting evidence to show Besides it is well known that valvular lesions at least may develop as a result of purely toxic processes, such as lead-poisoning, alcoholism and gout and as a part of general arterio-sclerosis from any cause

It is by no means an easy matter to trace the relations between an existing endocarditis or valvular lesion and pre-existing or coincident disease Different observers have stated variously the frequency with which rheumatism is complicated by endocarditis and valvular disease For purposes both of independent analysis and of comparison Worobjew[1] undertook a study of 180 cases of valvular disease of the heart observed in the therapeutic hospital clinic at Moscow from 1892 to 1897 in which a full and reliable history could be obtained, omitting from consideration cases of aneurysm and disease of the aorta without complicating valvular disease and of acute ulcerative endocarditis, as well as purely functional inorganic disease of the heart A history of acute rheumatism was obtained in 54 of these cases (30 per cent) although an undoubted connection between the commencement of the symptoms of the cardiac disease and the acute rheumatism was made out in but 20 (11 per cent) Even in some of the latter it is thought that there may have been antecedent valvular disease, the attack of rheumatism serving merely as a cause for the functional disturbance In the remaining 34 cases (19 per cent) the symptoms of derangement of cardiac function made their appearance a longer or shorter period after the subsidence of the attack of rheumatism, so that there may be some doubt as to the relation between the two conditions In 6 cases (3 3 per cent) a history of chronic rheumatism was obtained but it is thought that these cases may fairly be included with the remaining 120, in which there was no relation to acute rheumatism Of this number 29 were complicated by aortic aneurysm—16 per cent

It might be supposed that age would be an important factor in the development of valvular disease of the heart through sclerotic processes but an analysis of these cases from that standpoint showed that those of non-rheumatic origin constituted the larger number at every period It was found that the acute exan-

1 Deutsches Archiv für Klin Medicin 69 B 5 6 H p 466

themata and also other acute infections without exanthem played an exceedingly small part in the etiology of acute endocarditis The question arises whether acute endocarditis may occur as an independent disorder but the consensus of opinion is that it is merely a clinical manifestation of some form of infection The number of cases of such obscure or indefinite origin can not be considered as large There is, however, reason for believing that endocarditis not of rheumatic origin may often be of chronic development, inasmuch as it appears related largely to influences that favor the occurrence of chronic processes, such as cardiovascular sclerosis It is possible that antecedent acute infections may contribute to this end by lowering the resistance of the organism to such influences, they may at least favor the progress of the disease In a number of cases further there is no history of infectious diseases whatever In some also there is evidence of a congenital predisposition to chronic disease of the vascular system In the cases complicated by aneurysm a history of syphilis, gonorrhea and malaria was particularly common

The results of this study may be summarized as follows Acute articular rheumatism plays a more important rôle in the etiology of chronic valvular disease of the heart than any other infectious disease alone, but it is of less significance in this connection than all other causative factors together Endocarditis is less commonly of rheumatic origin at all periods of life than it is due to all other causes It is highly probable that non-rheumatic endocarditis is in the majority of instances not acute in onset, but is a chronic disorder from the beginning

THE ETIOLOGY OF ACUTE HEMORRHAGIC PANCREATITIS

Halsted[1] describes the clinical and surgical features of a case of acute hemorrhagic pancreatitis, the post-mortem findings in which seem to have led to a valuable demonstration in regard to the etiology of this affection The patient was a strong man, 48 years old subject to attacks of "indigestion" Following an attack of this sort there developed great abdominal pain, cyanosis, especially of the abdominal wall, the pulse running from 87 to 92, there was no abdominal distention and but little vomiting The pain was intense At the operation blood-stained fluid escaped, areas of fat necrosis were seen in the omental and peritoneal fat, and there was found some blood-stained serum in the tissues about the pancreas The common bile-duct was distended, but no calculus was found Death took place soon after the operation

At the autopsy, by Dr Eugene L Opie,[2] there was found the fat necrosis, acute hemorrhagic pancreatitis and a small firm concretion, snugly filling the diverticulum of Vater, and too large to escape through the duodenal orifice For a distance the pancreatic duct was stained bright green with bile

In a number of instances acute pancreatic disease has been associated with cholelithiasis Opie recently collected 31 instances of this character,[3] and similar cases have been described since then by Lund, Bryant, Stockton and Williams, and others The etiologic relationship of the two affections are strongly suggested by this association, and the present case seems to furnish the clue to the mechanism whereby the pancreatic lesion is produced, namely retroinjection (Halsted) of the bile into the pancreas, due to the lodgment in the diverticulum of Vater of a calculus, thereby converting the pancreatic duct into a channel continuous with the bile-duct, from which neither bile nor pancreatic juice could escape Hemorrhagic pancreatitis has been produced experimentally by injection into the pancreas of a number of irritating substances, such as chlorid of zinc, gastric juice, bacteria, sulphuric acid, hydrochloric acid etc, but it is clear that these results could not be applied directly to the explanation of the genesis of human cases Bile had not been injected until the case here mentioned suggested to Opie the possible rôle of bile in acute pancreatitis He found that injection of bile into the pancreatic duct of dogs caused a necrotizing hemorrhagic inflammation of the pancreas, like that seen in the human cases and accompanied with fat necrosis The primary action of bile is necrosis of the parenchymatous cells and hemorrhage, rapidly succeeded by reactive inflammation Hence he concludes that cholelithiasis is associated so frequently with hemorrhagic and gangrenous pancreatitis because gall-stones impacted in Vater's diverticulum force bile into the pancreas Perhaps the admixture of pancreatic juice with bile in this case intensifies the destructive action We know from various experiments and observations that steapsin, one of the pancreatic ferments, may cause fat necrosis when it is set free in the abdominal cavity It is seen that a flood of light has been thrown upon these peculiar lesions, and as is so often the case, the explanations are delightfully simple and adequate Now that acute pancreatitis is beginning to be understood it will probably not be long before many more cases will come to be recognized than heretofore As pointed out by Halsted, we must learn to distinguish gall-stone attacks *per se* from those complicated by pancreatic lesions When such cases are recognized early enough the stone in the diverticulum may be removed The facts here touched upon will lead also to renewed study of the anatomical relations of the bile and pancreatic ducts and their common meeting-place, Vater's diverticulum

ALLEGED DRUG HABITS IN VERMONT

It is charged every little while by certain alarmists that, in some sections of the country drug habits prevail to a dangerous extent and are increasing among the population Very often this is alleged to be the

1 Bull of Johns Hopkins Hospital, 1901, xii, 179
2 Ibid, 182
3 Am Jour of Med Sci, 1901, cxxi, 27

case in prohibition districts with the inference that it is due to the suppression of alcoholic drinks A sample of this kind of sensational charge is afforded in a recent issue of an Eastern paper which takes up some alleged statistics of an article said to have been read before the State Medical Society of Vermont, and indulges in the usual generalizations According to the quoted physician's estimate there are sold in that state over 3 300 000 doses of opium every month aside from that prescribed by physicians or contained in patent medicines This is figured to allow one dose and a half daily to every person in the state over 21 years old and the journal quoted thinks that this means "that the people of the hills are wooing oblivion with greater assiduity than those of the wicked cities devote to the pursuit of ruin" It reasons out a cause for this in the loneliness of rural life and the social ban on liquor, dragging in incidentally the degenerative factors existing in a state that has been losing its best blood by emigration, leaving an apathetic and discouraged remainder seeking solace for their hard condition in drugs

Not having the original statistics before us, but assuming that they are quoted correctly, it is worth while to see whether they justify the deductions Assuming only one-half of Vermont's 343,000 inhabitants to be over 21, it would be hard to figure out an allowance of even seven-tenths of a dose daily for each Of course the size of the dose figures in the result but it is presumed that it is not over the ordinary one of say 1/6 gr of morphin, or a corresponding amount of opium It is estimated by Oppenheim that the average morphinomaniac using hypodermics consumes at least 15 grains of morphin daily The average opium-consumer per os takes no less, and probably much more It would seem, therefore, that even over three million doses sold each month would scarcely more than satisfy a few hundred confirmed morphin fiends, and would be an average supply for less than 2000 at the most If there are 2000 or even 1000 in Vermont the condition is bad enough, but it would not by any means imply such a devotion to narcotic indulgences as was alleged by the editorial quoted

It is an example of the readiness with which a certain class of minds take up and generalize upon imperfect data when they appear to support the individual preconceptions It is also a fair sample of much of the modern alarmist literature upon medical questions that have a certain popular interest There may be, though we seriously doubt it a very large number of habitual "moderate" users of narcotics in Vermont, but it certainly would not take a very large number of real confirmed opium fiends to use up the amount alleged to be consumed in that state

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EXTENDING AN OPERATION WITHOUT CONSENT

About two years ago The Journal noticed editorially the decision of a German court in regard to the liability of a surgeon for changing the operation while the patient was under anesthesia and could not therefore, be a consenting party A similar case has just occurred in Chicago,[1] where a woman sued a medical institution to which she had gone to be operated on for hernia After the incision was made a state of affairs was revealed that required a more extensive operation to save life, and it was done accordingly Suit was brought on the ground that the surgeon had exceeded his instructions and damages to the amount of $25,000 claimed The court promptly decided that the surgeon was justified, and ordered a verdict for the defendant but the case, it is said, will be appealed to the higher courts, which have so far never given out a decision on this point To the average medical intellect there would seem to be plenty of precedents for saving life without asking the beneficiary's permission, and to decide contrary to this would practically put a premium on murder There were such in the old laws, but they have been eliminated for the most part in this country and in modern times It would be a pity if any remained to apply in such a case as this Of course, the vital point is the danger to life, any consideration short of this should be very carefully estimated by the surgeon before proceeding under such circumstances In any case it will always be a valuable precaution to have an understanding with the patient before anesthetization that the surgeon is to have his or her full consent to the performance of whatever operation is deemed absolutely necessary Without this there is risk of unpleasant accusations, and likewise a risk of damages should the higher courts follow the German precedent Believing however, as we do, in American common sense we have faith that the decision of the lower court will be upheld

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THE CANTEEN

The resolutions passed in regard to the army canteen at the late meeting of the American Medical Association are being widely noticed by the lay press, and in a few instances the inferences deduced seem to call for comment It was certainly not the intention of the members of the Association who voted for the resolution to cast any slur on the honesty or intelligence of those who differ from them on this point and there are undoubtedly many members of the Association who do not favor the canteen or believe it to be a good thing The opinion of the great majority of those who voted for the resolution was, we believe, that from the evidence offered it is at best a necessary evil They simply endorsed it as better than the conditions existing without it It would be unfortunate if the impression should become generally accepted that the representative body of the medical profession favored habitual liquor-drinking *per se*, even when limited to beer and light wines It appeared however to those who voted for the resolution, to be the fact that a considerable portion of the regular army is recruited from a class that has very little control over its appetites either as regards liquor or other temptations, and that it is not possible otherwise than by the canteen to create at once conditions that will prevent their gratification in ways that are not desirable The resolution simply was an expression of opinion of those who voted for it that the canteen

1 See General News p 1791

is under present conditions a necessity as an adjunct to discipline It would be well, in case it is reinstated, that it should be under such regulations as will forestall temptation to make its beer-selling function a source of profit or to encourage the acquisition of drinking habits in those not already thus addicted We can not but recognize the fact that its existence is opposed by the consciences of a very numerous and respectable body of our fellow-citizens and while many of us may honestly differ with them, it is not, as some of the lay press would apparently have it, without a sincere respect for their worthy aims

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ECHINOCOCCUS ALVEOLARIS SIVE MULTILOCULARIS

Cases of this interesting form of echinococcus disease occasionally occur in the United States, especially in immigrants from Southern Germany and certain parts of Austria, Switzerland and Russia, where the disease is not so very infrequent Recently, Melnikow-Raswedenkow published an extensive monograph based on the study of the parasitology, general pathology and pathologic anatomy of about one hundred cases from various museums and laboratories of Europe In Russia the disease is more frequent than commonly thought, and it appears to be of rather wide distribution Among some of the principal results obtained by Melnikow-Raswedenkow may be mentioned that the disease may be primary not only in the liver, but also in other organs such as the brain, the spleen and the adrenals The peculiar changes produced in the tissues depend on the growth of the parasite itself, rather than on the nature of the reactions of the cells, so that it is safe to conclude that it concerns a special form of parasite In most cases the embryo is carried from the intestine into the liver, where it forms a multilocular chitinous mass corresponding to the mature proglottid of the tapeworm Ovoid embryos and scolices are produced and may penetrate into the surrounding tissues by ameboid movement Some embryos which reach lymph-vessels or blood-vessels again produce chitinous tufts from which new embryo develop The essential difference between ordinary echinococcus cysts and the multilocular form is that in the former daughter cysts develop only from the inner layer, whereas in the latter embryos form upon the external as well as the internal surface

The parasites of alveolar echinococcus disease induce proliferation of cells, accompanied with more or less necrosis thus leading to a form of infectious granulomatous process, the products of which consist of epithelioid, lymphoid, and giant-cells, and white areas of a form of cheesy disintegration Metastases may form by way of lymphatics and blood-vessels The source and mode of infection are as yet unknown Up to the present time successful feeding experiments have not been made The disease in man is a dangerous one and so far the only successful treatment is surgical The most pronounced symptoms in the majority of cases are those of tumor or cirrhosis of the liver, and it will be recalled that for a long time the disease was confounded with colloid carcinoma, Virchow showing that the lining of the irregular cavities with colloidal or gelatinous contents consists of the lamellated cuticle Jaundice and hemorrhages are frequent, especially in the latter stages

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THE RELATION OF PHYSICIAN AND SURGEON

The fact that mutual benefit is derived from consultations between physician and surgeon, in the case of many affections that were formerly considered purely medical, has been recently emphasized In all medical affections in which surgical intervention may become imperative to save life, as typhoid fever, gastric ulcer, cholelithiasis exophthalmic goiter, and numerous others, the physician must either associate with himself a progressive surgeon or thoroughly acquaint himself with the pathologic manifestations that furnish an indication for operative procedure and promptly invoke the aid of the surgeon when occasion demands Conversely, practical knowledge of the symptomatic indications of this class of diseases, as well as the more refined laboratory methods of investigating them, is of incalculable value to the surgeon He must at all events be able to interpret the results of laboratory research for the purpose of arriving at an accurate diagnosis In his Oration on surgery, before the recent meeting of the AMERICAN MEDICAL ASSOCIATION, Dr John A Wyeth[1] directed forcible attention to the common error of relying exclusively on the subjective and objective signs, on the one hand, and the importance of calling into requisition those invaluable aids to diagnosis that are furnished by bacteriology, the demostrations of hematology and a careful microscopic and chemical examination of the sputum, gastric juice, and urine on the other The address of Dr J M Anders, Chairman of the Section on Practice of Medicine, at the same meeting, also contains practical and timely suggestions along the same lines He emphasized the importance of a closer, truer union between the physician and surgeon, in the operating theater the clinical amphitheater and at the bedside, as well as the advantages of joint sessions between the medical and surgical sections for the discussion of that growing class of diseases that may present both medical and surgical aspects Neither so-called medical nor surgical affections are distinct entities, and hence a more liberal joint cultivation of the ever-growing field that is of mutual interest and concern to physicians and surgeons would be an important step in the advancement of the welfare of mankind Moreover a more intimate association would tend to lessen the aggressiveness of the surgeon and, what is perhaps even more important and desirable, lessen to an equal extent the conservatism of the physician Especially when viewed from the standpoint of treatment many affections demand at the present day surgical, coupled with physical, physiologic and therapeutic measures In short, they require the combined services of the physician and surgeon for their successful management This new condition of things has sprung from the invasion of the various viscera of the body by the surgeon as the result of improved methods and advancements in his art, and the ultimate benefits as compared with the pure medical treatment of former days are obvious

1 JOUR A M A June 8 190

Medical News

CALIFORNIA

Dr Charles L Ellinwood San Francisco, has been appointed to the Board of Regents of the State University

A new emergency hospital is to be erected in Los Angeles It will be a modern structure in every way and will accommodate about 350 patients

Elizabeth Bard Memorial Hospital, Ventura, is rapidly approaching completion The superintendent thinks that it will be ready to receive patients within three months

Dr Stanley P Black, professor of bacteriology in the medical department of the University of Southern California, at Los Angeles left May 17, for Europe, where he expects to spend a few months in Koch's laboratory

Fire at Presidio Hospital—A fire at the Army General Hospital at the Presidio of San Francisco, June 10, destroyed three wards, the medical supply room, kitchen and dining room, causing a loss estimated at $25 000 Thanks to the heroism and discipline of the hospital corps men all patients were safely removed

State Board of Health—The governor has appointed the following members of the State Board of Health Drs Rudolph W Hill Los Angeles, Walter B Coffey, San Francisco W P Mathews, Sacramento Charles A Ruggles, Stockton, and Calvin L Gregory, Yreka The new board met at Sacramento elected Dr Hill president and re elected Dr Mathews secretary

CONNECTICUT

The Hartford Board of Health has organized with Dr Thomas F Kane as president, and Dr Joseph B Hall as secretary, and has appointed Dr Arthur J Wolff, bacteriologist

Dr Richard S Griswold, Lyme, who has served as acting assistant surgeon in the Army, and assistant surgeon of Volunteers in Cuba, the Philippines and China has been appointed by the President as major and surgeon of Volunteers and ordered to the Philippines

Experimental Hospital for Tuberculosis—The Senate reported favorably the following bill The sum of $25,000 is hereby appropriated to the Hartford Hospital for the erection of an experimental hospital for the treatment of pulmonary tuberculosis in accordance with plans to be filed in the office of the comptroller State patients shall be admitted to and receive treatment in said hospital when erected, for the sum of $4 per week

Sanitation in Connecticut—In its annual report the Connecticut State Board of Health calls attention to the great difference in the results of private and hospital treatment of typhoid fever In six hospitals there were 693 cases, and the mortality was only 6 8 per cent. while 1163 cases in private practice showed a mortality of 20 per cent The sanitary conditions of Connecticut have been greatly improved in the past ten years owing to the increased authority conferred upon health officers By isolating cases of smallpox and other contagious diseases, disinfecting the premises where such diseases have been found, improving the sewage systems in several places etc. these officials have reduced the death rate from 19 2 to 17 9 per 1000 of population

DISTRICT OF COLUMBIA.

Dr Michael J McIntee has succeeded Dr Osmyn Baker as resident physician at the Washington Asylum Hospital

Columbian Medical School—The eightieth annual commencement of Columbian University Medical Department was held May 27 Dr F A de Schweinitz delivered the doctorate address and a class of thirty five was graduated

Emergency Hospital Changes—As a result of competitive examination Drs Bragonie and T D Stewart, of the University of Virginia and Dr Kuhn, of Georgetown University on June 1 assumed their positions as internes in the Emergency Hospital

Anti Spitting Resolution—The Medical Society of the District of Columbia has passed a resolution which declares that spitting upon paved sidewalks creates a nuisance dangerous to health and should be forbidden by law and the possibility of difficulty being encountered by the police department in enforcing a regulation forbidding spitting upon paved sidewalks constitutes no valid reason why such a regulation should not be promulgated

ILLINOIS

Dr John F Sloan has been appointed health commissioner of Peoria

Dr Mary M Mars, Evanston, for two years assistant head physician at the Cook County Insane Hospital, has resigned

Dr Joseph Robbins, Quincy, has been appointed superintendent of the Illinois Central Hospital for the Insane Jacksonville

Dr Arthur M Lee, Carbondale, has been appointed superintendent of the Illinois Asylum for the Criminal Insane, Chester

Dr Thomas Foster who has remained assistant at the Illinois Eastern Hospital for the Insane, under three administrations, has resigned

Dr Thomas R Mullen, Bloomington, has sailed for Ireland on a visit to his old home Before his return he will make a short tour of England

Dr Percy J Ashburn, lieutenant and assistant surgeon, U S Army, now on duty in the Philippines, has been ordered to Fort Sheridan to relieve Captain and Assistant Surgeon Francis A Winter, U S Army, transferred to Jefferson Barracks

Chicago

The baccalaureate sermon at Rush Medical College was preached June 16, by Prof Nicholas Senn

Dr Warren H Hunter has been appointed county physician by the Board of Commissioners of Cook County

Daniel D Healy, superintendent of public service, has been appointed warden of Cook County Hospital

Dr George Dohrmann will leave next week for Europe, he intends taking a course of one year at Vienna

The German Hospital is to be enlarged by a building to cover an additional frontage of 75 feet, and to cost $40,000

Provident Hospital benefits at least to the extent of $50,000 by the munificence of the late Dr W S Caldwell, of Freeport.

Rush Medical College held its class day exercises in the college amphitheater June 20 Prof James Nevins Hyde delivered the address

State Board of Health Examinations were held, June 6, at the Great Northern Hotel About 125 candidates for license to practice medicine in the state appeared

The cornerstone of the new clinical building for Rush Medical College was laid June 19, the address being delivered by Prof J M Coulter of the University of Chicago

Dr Allen T Haight and wife sailed for Europe on the *Deutschland*, June 13 He will read a paper on "Tuberculosis of the Eye" before the Congress of Tuberculosis, which assembles in London July 22

Dr Mergler's Bequests—By the will of the late Dr Marie J Mergler, $3000 is devised for the foundation of a scholarship in physiology for women in the University of Chicago and $3000 for the Woman's Hospital of Chicago

Rush Medical College held it annual commencement exercises at Studebaker Hall June 21 graduating a class of 191 The doctorate address on 'The Modern Need for Literature' was delivered by Prof Richard Burton of the University of Minnesota

Health of Chicago—There were 441 deaths reported to the Health Department during the week ended June 15, this being 28 more than during the preceding week and 67 in excess of the corresponding week of 1900 The increase in the week's mortality was chiefly among children under 5 years of age, there being 33 more at this age division than during the preceding week Two deaths were caused by sunstroke Measles claimed 14 victims during the week, this being 10 more than the preceding week

Northwestern University Commencement—The forty third annual commencement exercises of Northwestern University were held this week The annual alumni meeting and banquet was held at the Great Northern Hotel, June 19, and the commencement exercises of the medical schools at the Auditorium June 20 The doctorate address was delivered by Rev James Roscoe Day, Chancellor of Syracuse University N Y The Northwestern University Medical School graduated a class of 74 and 19 were graduated from the Woman's Medical College

IOWA.

The State Board of Medical Examiners at its last session issued certificates entitling 108 applicants to practice medicine in the state

Dr Lee W Dean, Iowa City, has been elected professor of otology, rhinology and laryngology in the College of Medicine of the University of Iowa, vice Dr Charles M Robertson, resigned

Dr Charles F Applegate, first assistant at the Iowa Hospital for the Insane at Clarinda, has been elected superintendent of the state hospital at Mount Pleasant, to succeed Dr F C Hoyt deceased

MARYLAND

The West Nottingham Academy elected Dr R E Bromwell, of Port Deposit, Cecil County, president

Dr Carroll's Monument—The monument to the memory of the late Dr Thomas King Carroll was dedicated June 12 in the cemetery of Old Trinity Church on the banks of the Little Choptank River, Dorchester County The people came from all over the county and from distant cities and counties of the state, but were principally those among whom the revered physician lived and labored during his professional career of fifty years It was a spontaneous tribute to the memory of a noble physician and valued friend The monument of Italian marble was erected by the contributions of 200 or more of the doctor's patients It rises from a base of 2 ft 8 in broad to a height of 10 ft 8 in It stands at the head of the grave in the Carroll lot with an appropriate footstone on which a cross is carved

Baltimore

Dr William Osler, wife and son sailed for Europe June 19

Dr Samuel Kohn will spend the summer in South Germany

Dr and Mrs John Turner have gone to Halifax, Nova Scotia

Dr T C Gilchrist sailed June 20 and will spend the summer abroad.

Dr Charles E Simon and family are summering at Chester, Nova Scotia

Dr Thomas J Ward and wife will leave for a trip to the Pacific coast July 8

The National Temperance Hospital, attached to the Maryland Medical College, has changed its corporate name to Franklin Square Hospital, of Baltimore

Smallpox—At the monthly meeting of the State Board of Health, June 12, it was announced that there were but three cases of smallpox in the state, one here, one in Allegheny County and one in Montgomery County

President Ira Remsen, M D, of the Johns Hopkins University, will attend the annual banquet of the alumni of the College of Charleston, S C, and will respond to the toast "The Colleges of the United States"

The University of Maryland Hospital will build a four story and roof garden on the present nurses' home of the institution, providing 15 sleeping rooms for day nurses and quiet sleeping apartments during the day for those on night duty There will also be a free infirmary for nurses and a diet kitchen course of three months on the scientific principles followed in the Drexel Institute

Health of Baltimore—The annual report of the City Health Department for 1900 contains a valuable series of maps showing the location of every case of diphtheria, scarlet fever, consumption, typhoid fever and pneumonia during the year There were 1861 cases of diphtheria and 281 deaths, 402 cases of scarlet fever and 20 deaths The maps show the remarkable fact that only a few cases of scarlet fever and diphtheria develop among the very poor living in the alleys, showing, it is said, the influence of schools in the dissemination of these two diseases since the children of the class just named do not attend school The annual death rate was 19 77 per 1000 For whites the rate was 17 48 for the colored 33 42 per 1000 There were 8,653 births and 10,700 deaths reported Consumption caused 1056 deaths, pneumonia, 1303, Bright's disease, 618, heart troubles, 660, and typhoid fever, 189 An earnest plea is made for a general sewerage system, improved street paving and an infectious disease hospital

Johns Hopkins Commencement—The commencement of Johns Hopkins University was memorable for terminating the first quarter century of its existence There was a marked increase in the number of medical graduates, the class numbering 54 Of these 6 were women, 7 less than last year The principal address was delivered by Dr Henry M Hurd, professor of psychiatry in the medical school and superintendent of the hospital The following appointments in the Medical School were announced Charles R Bardeen, M D, associate professor of anatomy, Thomas B Futcher, M B, associate professor of medicine, Walter Jones, Ph D, associate professor of physiological chemistry, Robert L Randolph, M D associate professor of ophthalmology and otology, Stewart Paton, M D, associate in psychiatry, Percy M Dawson, M D, associate in physiology, Eugene L Opie, M D, associate in pathology, and Henry Barton Jacobs, M D, and Thomas McCrae, M D, associates in medicine

MICHIGAN

Grand Rapids Medical College held its fourth annual commencement exercises June 3 The address to the graduating class was delivered by Dr Clarence H White, president of the college Degrees were conferred on a class of fifteen

Saginaw Valley Medical College, Saginaw, held its fifth annual commencement, May 22, and graduated a class of twenty six Dr Victor C Vaughan, dean of the Medical Department of the University of Michigan, delivered the doctorate address

Health in Michigan—In the Monthly Bulletin of Vital Statistics, the report of the secretary of the State Board of Health, based on the sickness statistics shows that in the month of May, 1901, compared with the average in the ten years preceding, scarlet fever, smallpox and typhoid fever were more than usually prevalent, and consumption, remittent fever, inflammation of bowels, measles and cerebrospinal meningitis were less than usually prevalent in the May just passed

Smallpox in Michigan—Since the first of January outbreaks of smallpox in 199 localities in Michigan have been caused to cease, and in 132, or 66 per cent., of these outbreaks the disease was restricted to the one household where the first case occurred Notwithstanding this splendid record of effective work by the health services, state and local, the disease continued to spread because in the other outbreaks where the disease was not restricted to the first household it was first called Cuban itch, "cedar itch," chicken pox, or acne, and not reported to the health officer so that restrictive measures could be taken It is now present in 75 places in Michigan, 5 places more than in the preceding week

Spreading Life Saving Knowledge Among the People—One of the most important but less conspicuous phases of the work being done by the State Board of Health is shown in the report for April, of a village health officer in Southern Michigan He reports "By a letter from the secretary of the State Board of Health I was induced to report the want of sanitary care and precautions in the last few weeks' life of a patient who died of tuberculosis of the lungs in this village last spring The poor unfortunate was moved about from family to family of her relatives, and cared for as well as their means could afford, but in utter neglect of all the means of preventing its communication to others Most of this neglect came from lack of knowledge as to what could be done by poor folks to lessen the chances for taking the disease" By attracting attention to such instances, and by taking advantage of them for the instruction of the people, much can be done and is being done for lessening the spread of tuberculosis

NEW YORK

Quarantine against Cleveland is threatened by the Health Commissioners of Buffalo unless the authorities of the former city make strenuous efforts to stamp out smallpox There are now said to be 100 cases of the disease in Cleveland

Smallpox—A serious condition exists in Suffern Rockland County, owing to the alleged error of the local health officer in diagnosing smallpox as "Cuban itch" The state authorities, at the instance of complaints from New Jersey, investigated and found many cases of smallpox

The Syracuse College of Medicine has changed its administrative plan so that hereafter there will be no separate administration at the medical college The finances will be in the charge of the treasurer the same as at the other colleges, except as may be necessary to accommodate any special case

New York City

Cornell University Medical College held its third annual commencement June 5 when degrees in medicine were conferred on a class of twenty six, fourteen of whom were women

Tuberculosis is hereafter to be classified as a contagious disease by the immigration officials and consumptives from other lands will be denied admittance to this country

Gift to the Academy of Medicine—A large portrait of Dr William H Thomson was presented to the New York Academy of Medicine, June 6, by Dr William M Polk, dean of Cornell University Medical College

Harsen Prizes—The trustees of the College of Physicians and Surgeons have established three Harsen prizes for proficiency at the final examinations in practical anatomy, clinical medicine, clinical surgery and several other subjects The prizes are $500, $300, and $200 respectively, for the three highest men It has been the custom at the College of Physicians and Surgeons to award a diploma of "examination honors to each of the ten men of the graduating class who pass the best examinations in trying for their doctor's degree The ten men thus honored are entitled to take part in special competitive examinations and the three most meritorious competitors receive the first, second and third prizes, respectively

WISCONSIN

The New La Crosse Hospital, which has been erected at a cost of about $50,000, was formally opened to the public May 14 The hospital has accommodation for 50 patients

St. Mary's Springs Sanatorium, near Fond du Lac, is to be erected at a cost of $25,000, donated by John T Boyle The institution will be under the charge of the Sisterhood of St Agnes

GENERAL

Extending an Operation Without Consent.—A woman was operated upon at the Post Graduate Medical School of Chicago, by Dr Franklin H. Martin for the reduction of a large ventral hernia It was discovered that the patient had tuberculosis of the appendages, which condition had not been indicated by any of the symptoms and was wholly unsuspected The tubercular condition was quite extensive and Dr Martin being of the opinion that the ovaries had lost their function and that the disease was so developed that there would be no hope for the patient's recovery therefrom, unless the ovaries and tubes were removed, proceeded to remove them The patient, upon being informed of this operation, instituted an action for assault and battery against Dr Martin, the Post Graduate Medical School Dr Clarissa Bigelow and Dr Eliza R Morse, for the recovery of $25,000 damages The defendants through their attorney, Frank Crozier pleaded in justification, that although the actual consent of the patient had not been obtained for the removal of the ovaries yet inasmuch as that was the proper thing to do surgically and inasmuch as the patient's life would have been lost had it not been done the law would presume that the patient had given her consent that all things necessary be done The defense thus squarely raised the question as to what is a surgeon's authority when he comes across unexpected conditions while performing an abdominal operation The point has never been passed upon by any court of review, and the question is still an open one legally The case against Dr Martin has been twice tried in the Superior Court of Cook County once before Judge Brentano and again before Judge Kavanagh Judge Brentano directed the jury to find the defendants not guilty, on the motion of the attorney for the defendants who urged that the plaintiffs had not proven that the operation had been performed After directing the verdict, Judge Brentano, the point being technical, at once granted the motion for a new trial, and the case was immediately called by Judge Kavanagh, who at the close of the evidence introduced by the plaintiff, on motion of defendant's attorney, instructed the jury to find the defendants not guilty While he did not expressly base his decision on the theory that plaintiff had impliedly authorized the defendants to do whatever in their opinion was for her best interests yet he clearly indicated that he would so hold the law to be, should the point be properly raised The plaintiff prayed an appeal to the Appellate Court, the decision of which will be awaited with considerable interest. Attorneys are somewhat divided in their views as to what the courts will hold the law to be, but the best opinion is that there is absolutely no doubt that when the question is properly presented to an upper court the law will be laid down to be that a surgeon is authorized to do what in his judgment the physical well being of the patient requires But until the law is thus established the attorneys agree that it would be best to have the express consent of a patient. It may be added that the patient was a charity case.

CANADA

Dr Howard Barnes, Montreal, paid a visit to Cornell University last week, where he installed in the physical chemistry department an exceedingly delicate pyrometer of his own invention, which is capable of measuring accurately a temperature of 3000 degrees Fahrenheit

McGill Convocation—Medical degrees were conferred at McGill on the afternoon of May 14 to the number of 91 The four prize men were all graduates in arts, two of them hailing from Toronto University Dr William Gardner delivered the address to the students, while Dr Harold Ker replied with the valedictory

McGill University has been chosen as one of the institutions which will carry on original research work under the supervision of the newly incorporated Rockefeller Institute of Medical Research When this work is commenced at McGill it is understood that Professor Adami, of the pathological department will be in charge

Ban on Consumptives—Sir James Grant, Ottawa, president of the Canadian Tuberculosis Association, is authority for the statement that recommendations have been made to the Canadian Government to deal with immigrants affected with consumption along similar lines as inaugurated by the United States Immigration Department

Toronto University Items—Convocation of all departments took place on the afternoon of June 7 Dr R A Reeve, dean of the medical faculty and president of the Alumni Association, presided The honorary degree of LL D was conferred on his excellency, the Governor General, Lord Minto, and also on Dr Louis Frechette, the French Canadian poet

Montreal General Hospital—The report for the month of May of the Montreal General Hospital shows that there were 19 cases of typhoid fever in the hospital for the month, which is unusually large for that month of the year Two hundred and sixty-eight patients were admitted to the wards and 251 were discharged There were 20 deaths, and the daily average of patients was 160

The progress of the medical department of the provincial university has been so great that it has become necessary that a much larger building shall be provided for its accommodation It is expected that arrangements will soon be entered into by means of which, when the School of Practical Science addition is built, the medical department will have a handsome new building, which will be well equipped in the most modern manner

Hospital Appointments—Dr F Fleury has been appointed medical superintendent of the Notre Dame Hospital, Montreal, to replace Dr A Ethier, who has resigned to pursue post graduate work in Europe He will have associated with him as house surgeons Drs A. Brosseau V Chapdelaine, A St Pierre and J Edouard Gremier Dr Ethier, who leaves the hospital, occupied the position for five years

Women Doctors Recognized—Two Toronto hospitals have this year recognized the claims of the lady medicos when making the annual appointments on their resident staffs, and it is likely that hereafter the Toronto General and the Victoria Hospital for Sick Children will have a lady physician constantly on their staffs The question has been raised whether they are to occupy the usual quarters provided for the house surgeons

Medical Students in South Africa—Those medical students who were serving in South Africa were all granted relief from their examinations by the Ontario Medical Council Two received their matriculation, two their primary examination, and six were registered as practitioners Some discussion arose on this point, when Dean Geikie of Trinity Medical College, declared emphatically that if this simple measure of justice was not done to these men who had taken their lives in their hands out of patriotism, he would no longer occupy a seat in that Council

New Canadian Society—The graduates of Queen's University (Kingston Ontario) in New York have organized a new Canadian society to be known as the New York Society of Graduates and Alumni of Queen's University of Kingston President, Dr James Douglas, first vice president, Dr Farquhar Ferguson, second vice president, Dr John R Shannon, executive committee, Drs L H Gardiner W G Fraleck, and Mr D C Porteous and R. S O'Loughlin The society will act conjointly with the New York Society of McGill University and the Canadian Society of that city in sending a representative to present an address to the Duke of Cornwall and York on the occasion of his visit to this country

Finances and Officers of Ontario Medical Council—The report of the finance committee recommended that the salary of Dr H W Aikins be $500 for treasurer for the ensuing year The treasurer estimated his revenue for the coming year at $25,136, comprising cash in bank, $3,936, assessment dues, $4,400, registration fees, $1,800 rents, $4,000, fees from professional examinations $11,000 The estimated expenditures is $17 885, leaving an estimated balance of $2,751 Officers elected President Dr L Brock, Guelph, vice president, Dr Emory, Toronto, registrar, Dr R A Pyne, Toronto treasurer Dr Wilberforce Aikins, Toronto, auditor, Dr Patton, Toronto

Sir William Hingston has been distinctly honored by the Pope for charitable work and zeal for the church "The Papal Cross" has been bestowed "for the Church and Pontiff" His Grace, Archbishop Bruchesi, conveyed to Sir William the gift of the head of the church which was accompanied by the following letter from Cardinal Rampolla, the Papal Secretary of State "His Holiness has deigned to accord the Cross from the Church and Pontiff to Sir William Hingston as a recognition of his devotion and fidelity to the church and its supreme head The Cardinal Secretary of State has the pleasure to transmit him the diploma and the said cross in order that he may wear it on his breast as it is customary to do with other decorations"

FOREIGN

London s Bedlam to Move—For nearly a hundred years Bethlehem Hospital for the Insane, colloquially corrupted into "Bedlam" as early as the 13th century, has occupied its present site in Southwark which it has now outgrown, and will be converted into a park This will be its third move in the many centuries of its existence

Royal Condition Wrongly Diagnosed—To clear himself of a charge of having made a wrong diagnosis when called to see Queen Draga of Servia Dr Caulet, of Paris, has published in *La Semaine Médicale* the full correspondence which passed between him and the Servian court, and gave in detail the queen's symptoms, which simulated pregnancy

Thomas Bond, F R C S England, 1866, eminent as a surgeon and analyst, committed suicide in London June 6, by throwing himself from a third story window of his residence He had been suffering from melancholia for about two years For many years Dr Bond was analyst to the Home Department and lecturer on forensic medicine in Westminster Hospital

LONDON LETTER

A Snub to the Profession

Some time ago a number of gentlemen, including Mr Arthur Chamberlain, brother of the Colonial Secretary, founded the "Birmingham Consultative Institution," the object of which was stated to be to secure for the working classes of the city the advantages of consultation with eminent practitioners, which could at present be obtained only by fees beyond their means A fee for consultation of $2 50 was fixed, and a certain Dr Irvine was appointed The medical profession of Birmingham immediately took up arms against the Institution, which they regarded as simply a means of advertising the physician in question and obtaining for him very comfortable fees They pointed out that the Birmingham consultants were perfectly satisfied already to see patients at this reduced fee if their position was such that they could not pay more Dr Irvine was brought before the General Medical Council and convicted of unprofessional conduct in allowing himself to be advertised by the Institution The Council decided not to immediately remove his name from the medical registrar, but to give him six months to think over his position As a result he resigned his position in connection with the Institution No sooner had he done so than he was appointed one of His Majesty's Inspectors of Schools In the House of Commons a member called attention to the matter, and insisted that he should not have received the appointment with such a charge hanging over his head No doubt this appointment must have been brought about by the influence of the Colonial Secretary's brother In defending it the Colonial Secretary said that Dr Irvine had only infringed the "trades union rule" of the profession against advertising and that as there was no accusation against his private character the appointment was not improper Sir Walter Foster, a medical member of Parliament, submitted that on public grounds no person in such a position as this doctor awaiting the judgment of the General Medical Council on a charge of which he had been found guilty should have been appointed to a high public office This stigmatizing as a "trades union rule" the injunction against medical advertising, an injunction which really is in the interest of the public more than the profession, and this cynical contempt by the Government for their own court, the decision of which on purely professional matters the brightest judges have declared to be unalterable, may seem extraordinary It is to be accounted for by two facts The profession is unorganized and commands no vote of which governments are afraid, and therefore is a political cypher, secondly, as has been before explained in THE JOURNAL, science commands no general respect in this country

Sweets Sparkling with Glass

A physician in Bedford has forwarded to the *Lancet* for analysis some sweets which he thought were the cause of severe abdominal pain in children under his care The *Lancet* analysis disclosed the fact that the sweets were coated with small particles of glass, which were no doubt the cause of the symptoms Powdered glass is a strong irritant poison Hence this is a very serious form of contamination The makers of the sweets have not been traced This is a duty which the local authorities should perform

A Ladies' Public Health Society

The Ladies' Public Health Society of Manchester and Salford, which has been in existence some years, represents a form of activity as unusual as it is useful Its object is to bring sanitary knowledge into the houses of the poorest Its scope has been greatly enlarged by connection with the sanitary committees of Manchester and Salford The working class neighborhoods are divided into districts containing 1000 to 2000 cottages Each has a lady superintendent and a "health visitor" The latter is a working woman who lives in the district and knows the life of the poor from experience She visits all the cottages, makes friends with the people, and gives them hints and advice on all sorts of subjects, and has her eyes open for defects of drainage, overcrowding, sickness etc, all of which she reports on a form that is posted daily to the medical officer She pays special attention to infants, and always carries a leaflet on infant feeding, which she does not simply hand over to an ignorant young mother to be probably thrown into the fire but reads and explains it Such advice is much required for there is no limit to the ignorance of these young women, who have perhaps, spent all their unmarried life in a factory She is often the means of persuading families to exchange a small and unsanitary cottage for something better as the children grow up She can recommend a house, a caretaker, a charwoman, or whatever else may be needed to meet the wants of each case She can show how to make a bed, wash a baby, apply a poultice, or cut out a garment The health visitors have no special training, but are women of strong character and sound practical experience The lady superintendent is a sort of power behind the health visitor She can supply the theory on which the practice is founded She is consulted when difficulty arises and takes the whole financial responsibility She also holds weekly meetings in the district, and by dint of constant repetition makes a large body of women acquainted with the laws of health These in their turn influence their neighbors For nearly two years the Manchester health visitors have been systematically visiting and reporting on cases of consumption to the medical officer of health and spreading the knowledge of the nature of consumption and the means of preventing it

Acute Suppuration of the Thyroid Gland

At the Clinical Society, Mr R J Godlee read a paper on a case of this disease A woman, aged 20 was attacked with typhoid fever, at the end of October On November 20th a swelling formed at the lower part of the neck and was followed by a patchy, irritable rash all over the body, which disappeared on the 26th The swelling rapidly enlarged and the temperature rose, reaching 104 4 on the 28th, and 105 4 on the 29th When the patient was first seen the swelling occupied the middle line and extended somewhat to the right, but much further to the left There was dysphagia and the surrounding structures did not move freely over the swelling The mass did not move on deglutition An incision was made in the middle line and a large cavity was reached at a depth of half an inch in the gland It contained a reddish brown sticky fluid mixed with pus and much friable material A drainage tube was inserted and recovery was uneventful Mr Godlee discussed the different varieties of thyroid inflammation 1 idiopathic with spontaneous subsidence, 2, epidemic, as described by French military surgeons, which is of the nature of an acute specific fever, 3 the septic form, of which his case was an example Acute suppurative thyroiditis ha

been recorded in connection with many infectious states, such as rheumatic fever (8 cases), malaria (3 cases), typhoid fever (2 cases), diphtheria (2 cases), erysipelas, pneumonia, ozena, compound fracture and erythema nodosum Of 28 recorded cases suppuration occurred in 15, and in 6 others the point is not mentioned In the rheumatic cases suppuration did not occur Suppurative thyroiditis appears to be especially common in connection with typhoid fever The proper treatment is immediate opening and drainage It is not described among the complications in the text books, as it should be

Correspondence

Sulphuric Ether in Asphyxia Neonatorum

CHINOOK, MONT, June 11, 1901

To the Editor —In a recent case of asphyxia neonatorum, caused by delay in delivery and the use of forceps, I worked faithfully for one hour, using artificial respiration and external stimulants such as rubbing, slapping, hot and cold water, but with poor success as the heart became more feeble, cyanosis increased, and it seemed altogether a hopeless case I injected 5 minims sulphuric ether into the thigh In two or three minutes circulation was fully restored child was breathing naturally and it has since done well Having never seen any note of ether being used in these cases, I send you this, thinking it might possibly be of some value

Respectfully, C F HOPKINS, M D

Inherited Tendency to Appendicitis

CINCINNATI, OHIO, June 15, 1901

To the Editor —I am trying to establish the fact, which I believe from my own personal observation to be true—see *Lancet Clinic*, June 8— of an inherited tendency or predisposition to appendicitis If the readers of THE JOURNAL will kindly look into the family history of their cases and report to me, I will be under very many obligations

Respectfully, W H DEWITT, M D
61 Auburndale Place

Association News

THE ST PAUL MEETING AS VIEWED BY OUR CONFRERES

From the New York Medical Journal

The fifty second annual meeting of the AMERICAN MEDICAL ASSOCIATION, held in St Paul last week, was memorable from more than one point of view Those of our readers who were not present will have deduced this from the President's address and from the action taken on the plan of reorganization The reorganization tantamount to a new constitution, will, as we have before remarked make the general sessions far more amenable than before to parliamentary rules of procedure and better able to arrive speedily at a correct understanding of the merits of such questions as may come before the Association Many of the men who most thoroughly recognized all this before the meeting were fearful that, nevertheless, the scheme would fail of adoption this year, although sure to be sanctioned eventually The result shows once more that we should never despair of a good cause

The choice of a New York man as President for the ensuing year and of a place in the State of New York for holding the next meeting may doubtless be taken to foreshadow the re-establishment of the most cordial relations between the National body and the profession of the state Now that the presidency has been conferred upon one of their number, the physicians of the State of New York should make no distinction, in their own minds as to whether he represents the old or the new state organization for it is certain that no thought of discrimination on that score governed the nominating committee It is to be hoped, indeed, that there will soon be no factions, and that the two state organizations will be blended into one

The next meeting will be comfortably bestowed, for the capacity of Saratoga hotels is very great But the entertainment of the members is to be thought of as well as their lodging This the profession of the whole state must take upon itself It would be wrong to leave the burden to be borne by Saratoga alone after the superb hospitality of the twin cities of St Paul and Minneapolis We think we can promise our colleagues in all parts of the country such an effort as the State of New York can make to approach the standard of that hospitality

From the Medical News

The recent well attended meeting of the AMERICAN MEDICAL ASSOCIATION at St Paul shows better, perhaps, than did meetings held at points more convenient for larger numbers of medical men how deep is the profession's interest in the work of the National organization The Association has in these latter years risen out of a phase of quasi provincialism to be thoroughly representative of the best elements of scientific and professional progress in American medicine This state of affairs is most encouraging At the beginning of the new century the clearest truth in practical life is that assured success is the outcome only of thorough organization Many problems await solution in the social and legal relations of the medical practitioner to his clients and to public health These can not be definitely and properly solved unless the weight of a united medical profession can be brought to bear upon legislation and public opinion

The most noteworthy feature of the last meeting was the liberal attitude of the President and members of the Association toward that portion of the New York medical body whose defection ten years ago did so much to delay the unification of the profession in this country The recently adopted opinions are, however, only a result of a just survey of the motives and conditions that prompted the attitude assumed by the New York Society before its enforced withdrawal The President's acknowledgment of the right mindedness of the motives that formed the basis for the action of the representatives of the New York medical profession must go far to repair the breach that still exists

The selection of a New Yorker as President of the AMERICAN MEDICAL ASSOCIATION and the acceptance of the invitation to hold the next annual meeting at Saratoga must be taken as indices of a successful movement that is to give back to the Empire State her long lost influence in the councils of the National body of physicians The New York State Medical Association, thanks to the unsparing efforts of certain members, has been growing handsomely in numbers and influence in recent years The auspicious circumstance of having the annual meeting of the National Association to inspire to renewed efforts should add greatly to its membership and prestige With the recently adopted scheme of reorganization of the State and National associations, to cement the union of all the societies composing them and to make their influence available for professional purposes, there seems no reason to doubt that the day of a really united medical profession is at hand

The new plan of government adopted by the National Association promises by its thoroughly representative character to do away with the petty sectional politics that have sometimes proved a jarring element at annual meetings The proposed reformation of the code already under way, encourages the hope that a stumbling block in the way of certain serious minds as regards membership in the Association will be soon removed For many years past some of the rules of conduct embodied in the old code have if taken in their strictly literal signification, been a dead letter Since they have proved a source of disunion it must be a cause of congratulation on all sides that they are to be modified to meet the change of circumstances and evolution of conditions which make them a relic of the past

The recent St Paul meeting was especially noteworthy for the social relaxation it afforded attending members of the Association Every year the social gatherings take on a more

friendly character and the good effected is quite as much due to the familiar fellowship that reveals the character of co workers in the same field as to the scientific discussions that mirror recent practical advances in the various specialties The promise may confidently be held out that visitors to the meeting at Saratoga next year will meet with as pleasant a welcome and will be greeted with social features as attractive and gratifying as any ever provided That the AMERICAN MEDICAL ASSOCIATION is about to enter into the fullness of its heritage as a thorough representative of the whole medical profession of the country now seems assured

From the Boston Medical and Surgical Journal

At the meeting of the AMERICAN MEDICAL ASSOCIATION in 1900 a Committee on Organization was appointed This committee presented its report at the recent meeting of the Association at St Paul, and the report, including the revised Constitution and By Laws, on motion of Dr Harris, of New York, was adopted by a large majority The report itself is a lengthy document, for the full text of which and for the report on revision of the Constitution and By-Laws our readers are referred to THE JOURNAL of the Association, the issues of May 11 and June 8 The necessity for these changes has long been apparent Under the old conditions the transaction of business was either difficult or impossible, or so easy that it was undesirable The Association itself had not the weight in professional and public affairs to which its members and wide representation should entitle it The Association has now provided itself with a more suitable machinery with which to work, but the results attained must depend in large measure upon the cordial co operation of the State and county societies, a co operation which we hope may in due time be forthcoming

From American Medicine

The St Paul meeting of the AMERICAN MEDICAL ASSOCIATION was the best that has ever been held We know that the elation following each annual meeting makes such praise habitual but there is a unanimity and emphasis this year that we have never seen equaled This feeling is undoubtedly due to the acceptance of the new Constitution and By Laws prepared by the Committee on Reorganization, and to the limitation of the number of papers on the programs, whereby there was gained more time for the consideration of each, with a resultant improvement of the entire scientific work There was a thorough leveling up of the standards most gratifying, and this is better than the straining after brilliant discovery or incomplete research Those who attended the section meetings came away with a consciousness that much indefiniteness had been cleared up and many perplexing questions, if not settled, at least put in the way of decision There was everywhere manifest the desire to limit the social features, and the politics and discussions of the general sessions, and to regret that the section work had to be interfered with Under the new order of proceedings next year this will be done, as after the first day the general sessions will not interrupt section work The profession of St Paul and Minneapolis greeted the Association members with a hospitality and perfection of arrangements which insured the gratitude of every visitor

The reorganization of the AMERICAN MEDICAL ASSOCIATION, according to the recommendations of the committee, is a cause for profound gratification The long labors of the committee, motived by the sincerest desire to put the Association upon a basis that would insure reform and progress ended in a wise general plan and a perfection of detail that disarmed criticism and reduced opposition to a minimum Before the session had convened that so quickly adopted the new Constitution and By Laws, hardly anyone supposed the body would have so soon found its mind and heart at once, but when the strongest opponents, feeling that the inevitable was upon them, seconded the motion for adoption, there were few negative votes left The chief advantage of the new business arrangements is that the real legislative work of the Association will hereafter be confined to a compact body of about 150 delegates, elected for that purpose by the local state organizations The Association will thus get its work done, the legislation and business by men selected directly as representatives and sitting uninterruptedly for those ends, while the scientific programs will be carried out by those who come to the meetings with such objects in mind Dr Reed has been an exceptionally able and effective President, and under him has been instituted a reform which will, we prophesy, vastly increase the power and growth of the Association

From St Louis Medical Review

The delegates to the National meeting, who have returned, bring back good tidings Of their impressions the strongest is a sense of the importance to which the Association has attained and its certain prospect of becoming an enormous power for good to the medical profession The bickerings of by gone years have been laid aside in the desire to build up and organize an authoritative congress, which shall wield its influence for the glory of no man, but for the welfare of all The scientific program was extraordinarily interesting and valuable A noteworthy feature was the accuracy with which matters medical were reported—rhetoric and flights of fancy gave way to facts Eighteen hundred members were there for business and it was a business session in every particular The chief innovation in reorganizing the Association was the establishment of the House of Delegates, which shall be the legislative and fiscal body Each state and territorial society shall be permitted to send one delegate for every 500 or fraction of resident regular members, but the total membership of the House shall not exceed 150 Members of the House will be elected every two years and to be eligible shall have been members of the Association for at least two years The House of Delegates will elect the president, trustees and other officers of the Association, but no member of the House shall be eligible for such office The General Sessions will include all registered members of the Association, who shall have equal rights in discussion and voting upon pending questions As heretofore, it will be the scientific body These changes, which were recommended by the Committee on Reorganization, were unanimously adopted and the committee given a vote of thanks The Journal of the A M A is in a very prosperous condition, and its editor, Dr George H Simmons, received a vote of thanks It is expected that a general reorganization of the state and county societies will now follow to the end that a homogenous coherent, united and authoritative organization may be effected This great work should meet with hearty support, the revival is here and the most should be made of it

From Philadelphia Medical Journal

The annual meeting of the American Medical Association should always be of such importance as to be an object of interest and obstruction to every medical man in the United States The session just held at St Paul was of special interest and of historical importance because the Association succeeded in reorganizing itself This was a most significant feat, for it is one which has failed of accomplishment several times heretofore largely for lack of time This reorganization was absolutely essential as a preliminary to a successful career for the Association as a real representative national gathering Before this was accomplished it could scarcely be said that the Association did or could properly represent anything but itself In fact, it was simply a huge medical society It is now constituted with a House of Delegates, which represents the State Societies and by them the general profession, and which has a definite, determinative and effective organization This Chamber can represent a policy, pursue a course, transact a measure, and attend to business in a way that was formerly impossible in the loosely organized association at large If there is any virtue or force in representative government (and who doubts that there is?) the Association will now reap the benefits It is in a position as never before to influence public opinion and to act upon legislation, but its best friends should not forget that only that form of government "which is best administered is best" The new House of Delegates can soon sink to the level of some of the State Legislatures if it is run in the same way

It is rather too early to judge of the literary and scientific quality of the meeting It will be time enough to do that when the original papers are put into cold type These papers, however, were evidently of very uneven merit, as is apt to be the case in a large and miscellaneous gathering Perhaps one of the functions of the new House of Delegates will be to keep a jealous eye open for a high standard of scientific work

The Association put itself squarely on record in favor of some common sense legislation and declined to make a declaration on the subject of military morality in the Philippines when importuned to do so by some elderly parties who probably were not very well informed on this delicate subject

The revision of the code of ethics was not favored by the majority present and was voted down This will please the conservative members of the profession everywhere, but will probably not discourage the revisionists, who seem to be in an eternal mood of hopefulness and determination

From the social and personal standpoint, the meeting seems to have been fairly successful We have heard some complaints about lack of accommodations and about the great distances that separated the meeting places of the various sections Such things, we suppose are inevitable when the meetings are largely attended and are held in smaller cities and towns The city of St Paul distinguished itself for courtesy to the strangers within its gates

General Committee on Organization

The name of Dr G R Dean, of Spartanburg, N C, should have appeared among the signatures to the report of the General Committee on Organization, on page 1643 of THE JOURNAL of June 8

Section on Ophthalmology

TUESDAY JUNE 4—AFTERNOON SESSION

The Section was called to order Tuesday June 4 at 2 p m by the Chairman Dr J A Lippincott of Pittsburg

Dr H Gifford of the Executive Committee being absent, Dr Leartus Connor was appointed in his stead

Address of Chairman was read by Dr J A Lippincott of Pittsburg

Dr A E Davis of New York was invited to participate in the proceedings of the Section

A paper on Treatment of Strabismus Measures Other than Operative, was read by Dr Edward Jackson of Denver

A paper on Treatment of Strabismus Operative Measures was read by Dr C F Clark of Columbus

A paper on Strabismus Its Treatment was read by Dr A. E Davis of New York

A paper on The Cosmetic and Visual Results in Squint was read by Dr J M Ray of Louisville

These papers were discussed by Drs C M Culver of Albany Frank Allport of Chicago F C Todd of Minneapolis G C Savage of Nashville A R Baker of Cleveland J L Thompson of Indianapolis F C Hotz of Chicago Don Campbell of Detroit A B Hale of Chicago W H Wilder of Chicago G M Black of Denver A E Prince of Springfield A A Hubbell of Buffalo C A Veasey of Philadelphia and H Woods Jr of Baltimore

A paper on Concerning the Check Ligament was read by Dr J E Colburn of Chicago

The Section then adjourned

WEDNESDAY, JUNE 5—MORNING SESSION

Fiftieth anniversary of the invention of the ophthalmoscope Exhibit of ophthalmoscopes and ophthalmoscopic literature

An Address on the Origin and Development of the Instrument Together with a Description of the Historic Exhibit of Ophthalmoscopes and Publications on Ophthalmoscopy Prepared for this Meeting was read by Dr H Friedenwald of Baltimore

An Address on the Life of Helmholtz was read by Dr Casey Wood of Chicago

A vote of thanks was extended by the Section to Drs Friedenwald and Wood for their work in preparing the exhibit of ophthalmoscopes

Dr W H Wilder moved that a committee of three be appointed to try to arrange to have a permanent exhibit of ophthalmoscopes in the office of the Surgeon General at Washington Carried The Chairman appointed Drs Friedenwald Wood and Wilder

A paper on Tarsadenitis Meibomica was read by Dr M F Weymann of St Joseph Mo

A paper on A Case of Retroflexion of the Iris was read by Dr A A Hubbell of Buffalo

The Section then adjourned

WEDNESDAY JUNE 5—AFTERNOON SESSION

The Executive Committee acting as the Nominating Committee reported the following For Chairman Dr Frank Allport of Chicago for Secretary Dr C A Veasey of Philadelphia

Dr Edward Jackson moved that the Executive Committee nominate six members of the Section from whom two should be chosen to represent the Section in the House of Delegates Carried

A paper on the Treatment of Heterophoria Non Surgical Measures was read by Dr George M Gould of Philadelphia

A paper on the Treatment of Heterophoria Surgical Treatment, was read by Dr G C. Savage of Nashville

These papers were discussed by Drs S D Risley of Philadelphia M F Weymann, of St Joseph J E Colburn, of Chicago Frank Allport of Chicago J L Thompson, of Indianapolis C H Williams of Boston C F Clark, of Columbus H Woods, Jr, of Baltimore Leartus Connor of Detroit D B Wylie of Milwaukee, M J Sherman of Cleveland D Campbell of Detroit A E Davis, of New York H Harlan of Baltimore W B Pineo, of Minneapolis and J S Barnes, of Milwaukee

A paper on a Table of Paralyses of Ocular Muscles' was read by Dr H M Starkey of Chicago This paper was discussed by Drs F C Hotz of Chicago W H Wilder of Chicago M F Weymann of St Joseph and Edward Jackson of Denver

A paper on The Extraction of Hard Cataract Without Iridectomy was read by Dr S D Risley of Philadelphia

A paper on The Spontaneous Clearing of a Cataractous Lens was read by Dr Hiram Woods Jr of Baltimore

These papers were discussed by Drs F C Hotz of Chicago C F Clark of Columbus A E Prince of Springfield Edward Jackson of Denver, J L Thompson, of Indianapolis

The Section then adjourned

THURSDAY JUNE 6—MORNING SESSION

The Executive Committee placed in nomination the following six names from which to choose two delegates to the House of Delegates J A Lippincott H V Würdemann C A Wood, G E. de Schweinitz Edward Jackson and S D Risley

The ballot resulted in the election of Drs J A Lippincott, of Pittsburg and H V Würdemann of Milwaukee

A paper on the Economic Limitations of the Visual Acuity in the Various Trades and Professions was read by Dr H V Würdemann of Milwaukee

A paper on the Further Report on the Visual and Aural Qualifications of Transportation Employees was read by Dr Frank Allport of Chicago

Dr Allport also submitted the following as a Report of the Railroad Committee of the Ophthalmological Section on Examination of Railway Employees

REPORT OF THE RAILROAD COMMITTEE

Mr Chairman and Members of the Ophthalmological Section of the American Medical Association

Your Committee appointed three years ago, with a view of framing resolutions for the regulation of the eye and ear requirements of transportation employees was unable two years ago to bring in a unanimous report The Committee was therefore, requested to retain its membership and endeavor to report at the following meeting Meanwhile the Committee was lead to believe that action upon this subject would be taken one year ago by the International Medical Congress meeting in Paris It was therefore deemed wise to wait until the Committee of the International Congress submitted its report feeling that valuable ideas might be therein contained, which would enable us to improve the character of our own work The Committee therefore did not report at the City of Columbus and since then although the Chairman of this Committee has endeavored with all possible assiduity to ascertain something concerning the nature of the work accomplished along these lines by the International Congress he has been absolutely unable up to the present time although inquiry has been made along every possible avenue to ascertain whether any work of this nature was accomplished or not It therefore seemed useless to wait for the action of our European confrères believing that it is not necessary for a country which leads all other countries in its transportation facilities to await the action of other nations Your Committee, therefore begs leave to submit to the Section the following resolutions which have been unanimously adopted and which it is hoped will also be adopted by the American Medical Association and then correctly placed before the proper railroad authorities of North America

This work should be superintended by this Section

SECTION 1 The essential principle to be advocated is that railroad corporations shall require a scientific and correct examination of the eyes and ears of those employees at all to be concerned with the active operating of trains, or in giving or receiving signals

SECTION 2 Such primary examinations should whenever possible be made by regularly appointed eye and ear surgeons and this point is emphatically urged especially as the expense of a first examination may always be borne by the applicant but if such a course is not deemed expedient the company s surgeon aided by his medical assistants might conduct them with the understanding that all doubtful cases shall be sent to a regularly appointed eye and ear surgeon

SECTION 3 There shall be two general standards of visual and aural requirements viz those for new men hoping to enter the service and to be actively engaged in the operation of trains and in giving and receiving signals and secondly those men engaged in similar work who have been uninterruptedly in a company s service for five years and who have therefore a right to be called old employees

SECTION 4 New men shall be required to possess perfect color sense They shall also have a vision of 20/20 in each eye without glasses and have healthy eyes and not over one diopter of hypermetropia They shall also hear the whispered voice at 20 feet in a quiet room and have healthy ears

SECTION 5 For the purposes of graduated requirements old employees shall be divided into two classes as follows

Class A—Engineers firemen conductors brakemen switchmen signalmen switch tenders and engine dispatchers

Class B—Track foremen bridge foremen crossing flagmen bridge tenders gatemen train baggagemen telegraph operators station agents and station baggagemen

Employees enumerated in Class A shall not be retained in such positions if vision sinks below 20/30 in one eye and 20/40 in the other or if the whispered voice can not be heard in a quiet room at 15 feet by one ear and 10 feet by the other Employees enumerated in Class B shall not be retained in such positions if vision sinks below 20/40 in one eye and 20/50 in the other or if the whispered voice can not be heard in a quiet room at 10 feet by both ears Employees and especially engineers and firemen enumerated in Class A. must reach the visual standard without glasses and will not be allowed to wear distance glasses when on duty Employees

enumerated in Class B may reach the visual standard with glasses, and will be allowed to wear glasses when on duty, and will be required to do so if the wearing of glasses is necessary to bring vision up to the proper standard and shall always be required to carry an extra pair of glasses, when on duty in case of accident to one pair All employees shall have perfect color sense

SECTION 6 Re examinations shall be made of all men every three years, and after a severe illness, or accident, or any occurrence which seems to cast doubt on the visual and aural capacity of an individual Re examinations shall also be made more frequently on men known to be excessive users of tobacco, or to be suffering from syphilis, albuminuria diabetes, or acute or chronic eye and ear diseases Men shall always be re examined before promotion

SECTION 7 Men known to be excessive users of liquor shall not receive employment Respectfully submitted

FRANK ALLPORT, M D, Chairman of Committee

These papers were discussed by Drs L H Taylor, of Wilkes barre C I Clark, of Columbus H B Young, of Burlington, C H Williams of Boston A B Hale, of Chicago, M F Weymann of St Joseph, F C Hotz, of Chicago, and L Connor, of Detroit

Dr Edward Jackson moved the adoption of the Report Carried

Dr Edward Jackson moved that the incoming Chairman appoint a committee to bring the report before the Association in 1902 for its adoption Carried

The Section then adjourned

THURSDAY, JUNE 6—AFTERNOON SESSION

A paper on "Mules Operation with Cases" was read by Dr F C Todd, of Minneapolis This paper was discussed by Drs Frank Allport, of Chicago G M Black, of Denver H Friedenwald, of Boston and H Moulton of Fort Smith

A paper on "Mirror Writing and Inverted Vision" was read by Dr A B Hale, of Chicago This paper was discussed by Drs G C Savage, of Nashville and M F Weymann of St Joseph

A paper on the 'Report of Two Cases of Orbital Surgery" was read by Dr Adeline Portman, of Washington This paper was discussed by Dr M F Weymann, of St Joseph

A paper on 'Enucleation in Two Minutes with Demonstration," was read by Dr A T Mitchell, of Vicksburg This paper was discussed by Dr H Woods Jr of Baltimore

A paper on the "Newer Pathology of the Retina, with Special Reference to the Changes Produced in the Ganglion Cells by Certain Toxic Agents' was read by Dr H Friedenwald, of Baltimore

A paper on "Atrophy of the Retina" was read by Dr D S Reynolds of Louisville

A paper on a "Case of Blindness Due to Drinking Bay Rum Compared with Reported Cases Due to Methyl Alcohol and Jamaica Ginger" was read by Dr H Moulton of Fort Smith

These papers were discussed by Drs J M Ray, of Louisville H Woods, Jr of Baltimore A B Hale, of Chicago C A Wood, of Chicago H Harlan, of Baltimore, and R W Miller, of Los Angeles

A paper on 'Complete Recovery from Double Neuroretinitis, Clinically Resembling Albuminuric Retinitis in a Case of Prolonged Hematuria, with Symptoms of Bright s Disease,' was read by Dr C A Veasey, of Philadelphia This paper was discussed by Drs W H Wilder, of Chicago J M Ray, of Louisville, H Woods, Jr of Baltimore and E C Ellett, of Memphis

A paper on the "Value of Excision of the Superior Cervical Ganglion of the Sympathetic in Certain Eye Diseases' was read by Dr G F Suker of Toledo This paper was discussed by Drs C A Wood of Chicago G M Black of Denver W H Wilder, of Chicago, and C F Clark, of Columbus

The Section then adjourned

FRIDAY, JUNE 7—MORNING SESSION

A paper on "Herpes Zoster Ophthalmicus with Brief Report of Five Cases' was read by Dr W C Bane of Denver This paper was discussed by Drs Edward Jackson, of Denver, H M Starkey, of Chicago S D Risley, of Philadelphia, and Dr Freeman

A paper on the "Corneal Lesions of Acquired Syphilis' was read by Dr Wm H Wilder of Chicago This paper was discussed by Drs S D Risley, of Philadelphia Edward Jackson, of Denver, and J A Lippincott of Pittsburg

A paper on 'Lachrymal Stenosis in Infants and Its Treatment" was read by Dr Dunbar Roy of Atlanta This paper was discussed by Drs G C Savage of Nashville S D Risley, of Philadelphia L H Taylor, of Wilkesbarre R W Miller, of Los Angeles, and G M Black, of Denver

Dr G C Savage moved that it be recommended to the General Secretary of the Association that the expenses of the Committee on the Ophthalmoscope Exhibit, amounting to $25 24, and the legitimate expenses of the Secretary of the Section, be paid by the Association

A paper on the "Metamorphopsia Varians with a Report of Three Cases" was read by Dr Wm H Dudley, of Easton Pa This paper was discussed by Drs S D Risley, of Philadelphia, G C Savage, of Nashville, and J A Lippincott

A paper on the "Injuries of the Choroid' was read by Dr E O Sisson of Keokuk This paper was discussed by Dr Edward Jackson of Denver

The Section then adjourned *sine die*

Section on Diseases of Children

TUESDAY, JUNE 4—AFTERNOON SESSION

The meeting was called to order by the Chairman, Dr Samuel W Kelley, of Cleveland, in the Ryan Annex, at 2 30 p m

The Chairman delivered his address, which, on motion of Dr Edwin Rosenthal, of Philadelphia, was referred to the Executive Committee

The Chairman appointed Drs Wahrer and A C Cotton as substitutes for Drs Griffith and Tuley on the Executive Committee

Dr J B Garber, of Dunkirk, Indiana read a paper on "Measles" It was discussed by Drs C G Slegle, of Minneapolis Clifton Scott of Des Moines Brownell of Oneonta N Y J M Postle, of Hinckley Ill Charles Douglas, of Detroit Dr Barber of Minneapolis Dr Townsend of New Lisbon, Wis, and closed by Dr Barber

Dr J M Postle, of Hinckley, Indiana read a paper on The Pathology of Pertussis' It was discussed by Drs Douglas of Detroit Slegle, of Minneapolis, and J M Postle, of Hinckley, Wis

A paper by Dr J W Ballantyne, of Edinburgh, Scotland, entitled The Ante Natal Treatment of Hemaphilia," in the absence of the author, was read by the Secretary It was discussed by Drs Slegle, and Clifton Scott

On motion of Dr F X Walls, of Chicago, the Secretary was requested to convey to Dr Ballantyne the thanks of the Section for his interesting and instructive paper

Dr Brownell, of Oneonta, N Y obtained permission to report an interesting case in which a child had exhibited an extraordinary craving for chewing and eating paint and painted woodwork and plaster The case was discussed by Drs Isaac A Abt, of Chicago Charles Douglas, of Detroit Townsend, of New Lisbon, Wis and the discussion was closed by Dr Brownell

The Chairman appointed on the Nominating Committee the Executive Committee as at present constituted viz with Drs Cotton and Wahrer acting as substitutes

WEDNESDAY JUNE 5—MORNING SESSION

The meeting was called to order by the Chairman at 9 30 a m

The special order on the scientific program was a Symposium on Typhoid Fever in Children Dr J P Crozer Griffith, of Philadelphia was the author of the opening paper, which was entitled 'Symptoms and Course of Typhoid Fever The paper was read by the Chairman in the absence of the author

Dr John Lovett Morse, of Boston, was the author of the second paper on "The Diagnosis of Typhoid Fever in the Laboratory In his absence this paper was read for him

Dr Edwin Rosenthal of Philadelphia presented a paper on 'The Treatment of Temperature by Drugs'

Dr Isaac A Abt, of Chicago, reported 'A Case of Multiple Gangrene associated with Cholangitis and Adenoma of the Liver, complicating Typhoid Fever"

Dr Victor C Vaughan of Ann Arbor Mich, opened the general discussion which was continued by Drs Clifton Scott of Des Moines Charles D Douglas of Detroit, T F Wood of Angola Ind Barber of Minneapolis Johnston of Grand Rapids Mich George D Head of Minneapolis and Dr Ewing, of Salt Lake City The discussion was closed by Dr Rosenthal

The Chairman then read a communication from Dr Robert H Harvey, of Chicago, in which he accuses Dr Edwin Rosenthal, of Philadelphia of having published a certain paper for the purpose of advertising

Dr R H Harvey, of Chicago I would be glad to present this paper to the Section

Dr A C Cotton The time for the general session has arrived, and I do not think this is the place for personal disputes I move that this matter be referred to a committee for investigation, the committee to report at any time the Chair sees fit Seconded and carried unanimously The Chair appointed on this committee Drs Victor C Vaughan, John C Cook, C D Douglas

WEDNESDAY, JUNE 5—AFTERNOON SESSION

The Section reconvened at the call of the Chairman at 2 30 p m

Dr A C Cotton, of Chicago presented the report of the Nominating Committee which was that the committee had selected Dr H M McClanahan, of Omaha for Chairman, and Dr Frank X Walls of Chicago for Secretary On motion the report was accepted, and the Secretary was instructed to cast an affirmative ballot for these nominees This ballot having been cast, these gentlemen were declared elected

Dr Edwin Rosenthal of Philadelphia, then read a paper on Prolonged Intubations' It was discussed by Drs B R Shurly, of Detroit Golden, of Chicago I A Abt, of Chicago, Louis Burckhardt of Indianapolis and discussion closed by Dr Rosenthal

Dr John A Robison of Chicago, read a paper entitled "Prevention of Pulmonary Tuberculosis in Predisposed Children" It was discussed by Drs T F Wood of Angola, Ind Warren, of Detroit Work of Elkhart Ind Clifton Scott, of Des Moines Slegle of Minneapolis Kelsey of Minneapolis and Golden, of Chicago and the discussion was closed by Dr Robison

Dr F X Walls read a paper on "Protracted Influenzal Pneumonia in Children It was discussed by Drs I A Abt of Chicago B R Shurly of Detroit Campbell of Kansas and the discussion was closed by Dr Walls

Dr Carl Beck of New York City read a paper entitled 'Congenital Malformations with Roentgen Ray Demonstrations' No discussion

Dr Charles Douglas, of Detroit, read a paper on "Membranous Colitis in Infants"

Dr W W Keen of Philadelphia reported "A Case of Ureteral Calculus in a Boy of Ten" It was discussed by Drs Edwin Rosenthal, of Philadelphia Leonard of Philadelphia, S W Kelley of Cleveland Ohio Clifton Scott, of Des Moines and the discussion was closed by Dr Keen

THURSDAY, JUNE 6—MORNING SESSION

The meeting was called to order by the Chairman at 9 40 a m

Dr A C Cotton Chicago read a paper on "Diabetes Mellitus in Children' It was discussed by Dr C F Wahrer, Fort Madison Iowa and the discussion was closed by Dr Cotton

Dr Victor C Vaughan of Ann Arbor Mich presented the report of the Special Committee on Charges against Dr Edwin Rosenthal of *Philadelphia*

Mr Chairman and Members of the Section

Gentlemen —Your Committee appointed for the purpose of deciding whether or not Dr Edwin Rosenthal Chairman of this Section in 1900 used his official position for the purpose of advertising the product of a certain drug firm begs leave to submit the following brief statement of the facts presented in the case, and the finding determined upon

Dr Rosenthal s address as Chairman of this Section in 1900 contained a statement of the results obtained by the antitoxic treatment of diphtheria In this statement he reported 6325 cases treated with the antitoxin of one manufacturer and less than 900 cases treated with the products of all other manufacturers and the results seemed to show the superiority of the product of the firm that furnished the largest number of cases This firm has used

Dr Rosenthal s address widely for advertising purposes

Dr Rosenthal assures us that this use of his paper was not only without his consent but that the firm has continued this use of the address after receiving a protest from him

Your Committee offers the following findings which are respectfully submitted to the Section

1 That the conclusions stated in Dr Rosenthal s paper being founded upon cases so unequal in number are wholly without value in showing the relative merits of the products of the different manufacturers

2 That Dr Rosenthal as Chairman of this Section did use his official position to advertise a certain firm of manufacturers of antitoxin Whether this improper use of his official position was intentional or unintentional, we can not decide from the evidence before us

3 That this Section will look with disfavor upon any firm of manufacturing chemists which uses for advertising purposes any papers parts of papers or statements written or made verbally by any member of this Section in its proceedings

Respectfully submitted

VICTOR C VAUGHAN
CHARLES DOUGLAS,
JOHN C COOK.

Dr C F Wahrer Fort Madison Iowa moved that this report be received and adopted Seconded by Dr Dodson and carried unanimously

Dr Rosenthal asked that this report be printed in THE JOURNAL.

Dr John R Rathmell Chattanooga Tenn sent a paper entitled Albuminuria in Disease of the Kidneys in Infancy and Childhood which was read by Dr Walls in the absence of the author

Dr William Jepson Sioux City Iowa presented a paper on Congenital Cystic Kidney together with the specimen

Dr A L Wolbarst, New York City sent a paper on Gonorrhea in Boys The discussion was participated in by Drs Edwin Rosenthal Philadelphia Clifton Scott Des Moines C F Wahrer Fort Madison Iowa and A C Cotton and Cook Chicago

THURSDAY JUNE 6—AFTERNOON SESSION

The Section reconvened at 2 15 p m

Dr Clifton Scott Des Moines presented a paper entitled The Prevention of Infection in Babes Born of Tuberculous Parents It was discussed by Drs Rosenthal Philadelphia Johnston Grand Rapids F X Walls Chicago I A Abt Chicago J Noer Stoughton Wis John C Cook Chicago C F Wahrer Fort Madison Iowa E F Brush Mount Vernon N Y and Clifton Scott Des Moines

The next order was the Symposium on School Hygiene

Dr Leigh K. Baker of Cleveland sent a paper entitled The Introduction and Management of School Hygiene which was read in his absence by Dr Warren

Dr John Madison Taylor Philadelphia sent a paper on Physical Culture in Children and the Objects to be Attained

Dr William E Darnall Atlantic City N J read a paper on The Pubescent School Girl

Dr A W Wilmarth Chippewa Falls Wis read a paper on the Diagnosis of the Backward Child

Dr G Hudson Makuen Philadelphia read a paper entitled Speech as a Factor in the Diagnosis of the Backward Child

Dr C F Wahrer Fort Madison Iowa read a paper entitled A Plea for the Backward Child

Dr J Noer Stoughton Wis presented Some Considerations Regarding the Medical Criticisms of the Hygiene of Early Life

The general discussion was participated in by Drs Wahrer Shelby Kansas Clifton Scott Des Moines Edwin Rosenthal Philadelphia Work Elkhart Ind Wilmarth Chippewa Falls Wis B R Shurly Detroit Learned Massachusetts and Noer Stoughton Wis

On motion the Section then proceeded to elect two representatives to the House of Delegates

Dr A C Cotton Chicago nominated Dr Samuel W Kelley of Cleveland the retiring Chairman and Dr Cook Chicago nominated Dr A C Cotton Chicago

The Chairman appointed Drs Wahrer and McClanahan tellers The tellers reported that twelve ballots had been cast for each candidate whereupon the vice chairman declared Dr Samuel W Kelley and Dr McClanahan to have been unanimously elected the representatives of the Section to the House of Delegates for the ensuing year

Dr McClanahan was then introduced as the newly elected Chairman of the Section and after some appropriate remarks from him the Section on motion adjourned at 5 40 p m *sine die*

Married

GEORGE W ROBERTSON M D to Miss Kate Martin both of Macon Ga June 7

HENRY J WAY M D to Miss Florence Loretta Turlay both of Chicago June 19

J F PAYTE M D to Miss Anna Florence both of Weaverton Ind Ter, June 5

WILLIAM FULLER M D Chicago to Miss Jrell Gentry of Sedalia Mo, June 5

HERBERT R SUGG M D to Miss Florence Olney both of Clinton Iowa June 1

ALFRED I ZOBEL M D to Miss Maybelle Getz both of San Francisco Cal June 2

JOHN T STEWART M D to Miss Minnie M Wood both of Los Angeles Cal June 1

FRANK EVANS, M D Hastings, Pa, to Miss Jessie Frantz, of Harrisburg Pa, June 12

EDWIN M HUSTON, M D, Dayton, Ohio, to Miss Lulu Hyde, of Chillicothe, Ohio, June 12

WINSTON THOMAS MICHIE, M D, to Miss Eva Pauline Sale, both of Memphis Tenn, June 5

AMOS J THORNBER, M D Powellton, Ill, to Miss Anna G Schenck, of Nauvoo, Ill, June 5

H W KIRBY, M D, Cripple Creek, Colo, to Miss Eleanor E Bryan, at Denver Colo, June 12

E WILLIAMS, M D Kansas City, Kan, to Miss Lilian St John, of Manhattan, Kan, June 6

M P McELHANNON, M D, Belton, Texas, to Miss Sue J. Wallace, of Holland, Texas, April 7

DELAMERE FOREST HARBRIDGE M D, to Miss Cora Frances Brown both of Philadelphia, June 12

I MARTIN TRULSON, M D Janesville, Wis, to Miss Fredericka Falk of Stoughton, Wis, June 1

GEORGE WRAGG LAMAR M D, Quincy, Fla, to Miss Sarah Attaway Duval, of Madison Fla, June 5

EDMUND WILLIAM STEVENS M D, Denver, Colo, to Miss Florence Ballance of Peoria Ill, June 4

WALTER SELLMAN, M D Mt Airy, Carroll County, Md, to Miss Georgia Clary, of Baltimore June 5

FRANK L COOLEY, M D, Oswego, N Y, to Miss Fannie Rogers, of Hannibal Centre, N Y, June 3

CLARENCE F SCHLITZ, M D, Bowling Green Ohio, to Miss Isabelle Williams, of Marengo Ohio, June 1

T CLYDE ROUTSON M D, to Miss Margaret Millard, at Buckeystown Frederick County, Md, June 6

WILLIAM WILCOX DUNN M D, Richmond, Va, to Miss Ann Read McIlwaine, at Hampden Sidney, Va June 3

LEVIN I SOTHORON, M D Washington, D C, to Miss Marguerite Taylor at King George Court House, Va, June 4

PHILIP DOGGETT BOWLAND M D, Calumet, Mich, to Miss Jessica MacIntyre, of Knoxville Tenn, at Lake Forest, Ill

JOHN SAPPINGTON M D Darlington County, Md, to Miss Rosa Seldon Jacobs at Belair Hartford County, Md, June 4

GEORGE HOWITT WEAVER M D to Miss Carrie Earle, daughter of the late Dr Charles Warrington Earle, both of Chicago, June 12

HUGH HAMPTON YOUNG M D formerly of San Antonio Texas now of Baltimore to Miss Bessie Mason Colston, of Baltimore June 4

Deaths and Obituaries

William L Worcester, M D, pathologist of the Danvers (Mass) Insane Asylum and a well known alienist and writer on the subjects of mental pathology, died at Danvers, June 10, aged 56 His death was due it is said to blood poisoning from which he had been suffering for some time He should be put down as one of the martyrs of science it having probably been caused from an accident in his scientific work, although we do not know the particulars Dr Worcester graduated from the National Medical College, Washington, in 1873, and was for a time assistant physician to the State Asylum Kalamazoo Mich afterwards at the Arkansas State Asylum, Little Rock He has held his position at Danvers for about eight years and was one of the best known alienists of the country His loss is a serious one as there are not too many scientific workers in asylums at present He was a brother of Professor Dean C Worcester formerly of the Michigan University but now one of the members of the Philippine Commission, and well known by his researches in the natural history of the Philippine Islands, and other similar work

D W Marston, M D, Bellevue Hospital Medical College New York 1898, died at Niagara Falls, June 9 from pneumonia He was on his way to attend the St Paul meeting of the AMERICAN MEDICAL ASSOCIATION but was taken ill and left the party at Niagara Falls where he died four days later He was 26 years of age a man of great ambition of marked in

telligence, and of wonderful energy, which secured for him a reputation rarely won by men in the profession at so early an age He served as interne at the City Hospital, Blackwell's Island, also at the Hospital for the Ruptured and Crippled, and the Hospital of the Post Graduate Medical School of New York At the end of his term of service in the latter institution, he was appointed lecturer on orthopedic surgery, and also assistant visiting surgeon, to the Post Graduate Hospital He was also visiting surgeon to Daisy Fields Hospital, Englewood, N J

Thomas Sidney Scales, M D, College of Physicians and Surgeons, New York, 1867, for many years health officer, and late quarantine executive officer of Mobile, Ala, a member of the Mobile County Medical Association, and twice its president, a member of the Alabama State Medical Society, and professor of surgery and clinical surgery at the Medical College of Alabama, died at his home in Mobile, after a long illness June 5, aged 59

Calvin Terriberry, M D, Bellevue Hospital Medical College New York, 1873, one of the best known members of the profession in New Jersey died at his home in Paterson, N J, June 9, from uremia consequent on Bright's disease, aged 51 He was active in the organization of St Joseph's Hospital and had been a member of its surgical staff for twenty three years

Albert J Bloch, M D, Tulane University, New Orleans, 1892, formerly on the staff of the University, a member of the Louisiana State Medical and Orleans Parish Medical associations, died at Denver, Colo, June 8, from the effects of cyanid of potassium taken with suicidal intent, aged 34

Eugene R Lewis, M D, Jefferson Medical College, Philadelphia, 1874, president of the Woman's Medical College, Kansas City, treasurer of the International Association of Railway Surgeons, and a member of the AMERICAN MEDICAL ASSOCIATION, died at his home in Kansas City, Mo, June 8

Howard A Alexander, M D, Kentucky School of Medicine, Louisville, 1875, a prominent member of the Jefferson County Medical Association, died at St Vincent's Hospital, Birmingham, Ala, May 28, after a short illness from disease of the stomach

James Murray Stone, M D, University of Maryland, Baltimore, 1843, died suddenly at Govanstown, Baltimore County Md, June 5, aged 80 He was born near Salisbury, Md, and practiced until 1898 at Princess Anne, in same county

J Henry McCarty, M D, Atlanta (Ga) Medical College, 1880, one of the founders of Birmingham Medical College and a member of its faculty for several years, died at his home in Birmingham Ala, from paralysis, June 12, aged 50

Robert H Timpany, M D, Toledo Medical College, 1894, died from pneumonia, in Toledo, Ohio, June 7, aged 36 Dr Timpany was formerly editor of the *American Medical Compend*, and surgeon in the Ohio National Guards

Joseph C Pomeroy, M D, Castleton (Vt) Medical College, 1860, who had practiced in Waverly, Iowa, for forty years, and was a member of the county and state medical societies, died suddenly at his home, June 3, aged 62

George B Noyes, M D, Rush Medical College, Chicago, surgeon of the Waupaca Veterans' Home, and formerly a practitioner in Winneconne and West Superior, Wis, died suddenly at the Home, May 25, aged 55

William G Thirkell, M D, Royal College of Physicians and Surgeons Kingston, Ontario, 1861, for more than thirty years a practitioner in Sodus, N Y, died at his home in that place, May 29, aged 63

John Payne, M D, Jefferson Medical College, Philadelphia, 1886, a practitioner of Hillman, Ala, and a member of the Jefferson County Medical Society, was shot and killed at that place, May 30, aged 35

E A Gansel, M D, University of Illinois, 1900, and there after an interne at the Emergency Hospital, Milwaukee, died at the home of his parents, in that city, from consumption, June 2, aged 27

Paul Hubert Larose, M D, Laval University, Quebec, 1893, a practitioner of Indian Orchard, Mass, died suddenly at his home in that village, from heart disease, May 28, aged 31

E H Iden, M D, Rush Medical College, 1900, and there after interne in a hospital at Joliet, Ill, died at the home of his parents, in Leroy, from consumption, June 3, aged 26

Rufus Gillaspy, M D, Missouri Medical College, St Louis, 1884, assistant physician at the State Hospital for the Insane, Nevada, Mo, died suddenly in St Louis, June 6, aged 50

Maurice Lauren Healey, M D, New York University, 1887, of New York City, died at the home of his mother, in Plattsburg, N Y, June 7, from pneumonia, aged 37

Edward Watson, M D, University of Michigan, 1873, for some time health officer at Grand Rapids, Mich, died at his home in that city June 17, after a lingering illness

J Edward Wright, M D, Jefferson Medical College, Philadelphia, 1879, a practitioner of Southwark, Philadelphia, died at his home, June 9, from consumption, aged 43

Seth D Bowker, M D, Kansas City (Mo) Medical College, 1871, a pioneer physician of Kansas City, died from apoplexy at his home in that city, June 8, aged 71

James L Ringo, M D, Louisville Medical College, 1891, a practitioner at Elwood, Ind, and a member of the city council, died at Benton Harbor, Mich, May 28

Seth B Sprague, M D Bowdoin College, Brunswick, Me, 1867, died at his home in Jersey City, N J, where he had practiced for ten years, June 5, aged 61

Lemuel H Rogers, M D, Rush Medical College, 1863, of Mackinaw, Ill, died from appendicitis at St Joseph's Hospital, Bloomington, Ill, June 3, aged 65

Robert H Chilton, M D, Miami Medical College, Cincinnati, 1870, died after a short illness, from paralysis, at his home in Dallas, Texas, aged 55

George B Quigley, M D, University of Tennessee, Nashville, 1894, a practitioner of Rocky Hill Station, Ky, aged 24, was shot and killed, May 28

Richard Lingle, M D, University of Louisville, 1861, an army surgeon in the Civil War, died at his home in Orleans, Ind, June 10, aged 63

R B Archibald, M D, Missouri Medical College, St Louis, 1886 died at his home in Purdy, Mo, May 31, after a lingering illness aged 55

John C McKee, M D, Barnes Medical College, St Louis, Mo, 1896 died suddenly at his home in Hartford, S D, June 2 aged 35

Edmond Beale, M D, University of Pennsylvania, Philadelphia, 1855, died at his residence in Philadelphia, June 1, aged 81

Societies

COMING MEETINGS

Medical Society of New Jersey, Allenhurst, June 25 27
Wisconsin State Medical Society, Waukesha, June 26
Medical Association of Nevada, Reno, July 1
American Ophthalmological Society, New London, Conn, July 17

Golden Belt Medical Society—This society will meet in Topeka, July 3

Upper Cumberland Medical Society—The annual meeting of this Society was held in Cookeville, Tenn, May 27 to 30 Dr R E Lee Smith, Doyle Station, was elected president

Roentgen Society of the United States—The second regular meeting of this Society will be held at Buffalo, N Y, September 10 and 11, under the presidency of Dr Heber Robarts, St Louis, Mo

Decatur (Ill) Medical Society—At the annual meeting of this Society, held May 30, Dr Wilbur C Wood was elected president, Dr W K Hoover, vice president, and Dr C Martin Wood, secretary treasurer

Association of the Medical Officers of the Army and Navy of the Confederacy—This Association met, under the presidency of Dr James M Kellar, Hot Springs, Ark, at

Memphis, Tenn May 28 and 29, about 200 members being present

Buffalo Academy of Medicine—At the recent election of officers for the Medical Section of the Academy Dr Julius Ullman was elected chairman, and Dr Albert E Woehnert, secretary

Union County (Ohio) Medical Association—A number of physicians of Union county met at Marysville, May 28, and organized temporarily with Dr David W Henderson, Marysville, as president, and Dr Stanley J Bown, Claiborne, as secretary

The women physicians of Cleveland have organized a medical society which held its first meeting May 28 The officers of the Society are Dr Cora Stalling Seehrist, president, Dr Minnabel Snow, vice president, and Dr Fannie C Hutchins, secretary and treasurer

New Mexico Medical Society—At the annual meeting of this Society held May 8, 9 and 10, Dr George W Harrison Albuquerque was elected president and Dr J Frank McConnell, Lascruces, secretary

De Kalb County (Ill) Medical Society—The physicians of De Kalb county met at De Kalb May 30 and organized this Society with Dr Charles B Brown Sycamore, president, Dr Guy J Wormley Sandwich, vice president and Dr James M Everett De Kalb secretary and treasurer

American Medical Editors' Association—At the annual meeting of this Association held in St Paul, Dr Alexander J Stone of that city was re elected president and Dr Otho F Ball, St Louis Mo, secretary Dr Burnside Foster, St Paul, was elected vice president

Upper Des Moines (Iowa) District Medical Association The fourth annual meeting of this Association will be held at Spirit Lake, August 15, under the presidency of Dr Charles B Fountain, Valley Junction

Saline County (Ill) Medical Association—A preliminary meeting of this Society was held in Harrisburg, May 22, at which Dr S L Cheany, Harrisburg, was elected president Dr M D Empson Hartford, vice president, and Dr Joseph B Baker, Harrisburg, secretary and treasurer

Barnstaple District (Mass) Medical Society—This Society held its annual meeting at Hyannis, May 9, and elected Dr Louis Edmonds Harwich president, Dr Edwin M Parker, South Yarmouth, vice president, Dr George N Munsell, Harwich treasurer and librarian and Dr James H Higgins, Marston's Mills secretary

Clinton County (Ill) Medical Society—The annual meeting of this Society was held in Carlyle May 28 Dr William P Gordon Carlyle was elected president, Dr Theophilus Gaffner, Trenton vice president Dr M Broening, Carlyle, secretary, and Dr Philip H Leibrock, New Memphis, treasurer

Minnesota State Medical Society—This Society held a business meeting at St Paul June 3 at which Dr William A Hall, Minneapolis was elected president Dr John P Humes, Winnebago City vice president Dr Thomas McDavitt, St Paul, secretary, and Dr Richard J Hill Minneapolis, treasurer

White River Medical Association—At the annual business meeting of this Association, held at White River Junction Vt, Dr Alanson C Bailey, Randolph Vt, was elected president, Dr Howard N Kingsford Hanover N H, and Dr Mark P Stanley, White River Junction, Vt, secretary and treasurer

Bedford County (Tenn) Medical Society — This Society met for reorganization at Shelbyville June 1 Dr Frank B Reager, Shelbyville, was elected president, Dr George L Landis Unionville vice president, Dr William G Frierson Nashville secretary, and Dr J Isaac Campbell Shelbyville treasurer

Richland County (Wis) Medical Association—Representatives of the medical profession of Richland County met May 18 at Richland Center and organized this Society with the following officers Dr H Jackson Wall president, Dr Robert H DeLap, vice president and Dr Frank W McKee, recording secretary and treasurer, all of Richland Center

Indian Territory Medical Association—At the annual meeting of this Association held in Vinita, Dr George W West Eufaula was elected president Dr Bagby, Vinita first vice-president, Dr William A Haley Durant, second vice president and Dr Fred S Clinton Tulsa secretary and treasurer The next meeting will be held at Muscogee in December

Massachusetts Medical Society, Essex South District—The annual meeting of this branch of the Society was held in Salem, May 28 Dr Herbert W Newhall Lynn, was elected president, Dr Herbert J Hall, Marblehead, vice president, Dr Charles H Bangs, Lynn, secretary, Dr George Z Goodell, Salem, treasurer, and Dr George C Littlefield, Salem, librarian

Mason County (Ky) Medical Society—At the meeting of this Society at Maysville May 29, the following officers were re elected for the ensuing year Dr James Shackleford, Maysville, president, Dr Alexander Hunter, Washington, vice president, Dr Amos G Browning, Maysville, secretary, Dr A N Elles Maysville, corresponding secretary, and Dr Samuel R Hanover, Maysville treasurer

Fourth District Branch of the New York State Medical Association—This branch met for its seventeenth annual session, at Buffalo, May 31 The following officers were elected Dr Charles A Wall, Buffalo, president, Dr J William Morris, Jamestown, vice president Dr Bernard Cohen, Buffalo, secretary and Dr William Irving Thornton Buffalo, treasurer The 1902 meeting will be held at Chautauqua

Detroit (Mich) Medical Society—After an existence of only a little more than a year, this Society, at its first annual meeting, May 29, showed an enrollment of 355 against the charter membership of 43 with which it was organized in April, 1900

Alumni Association of the College of Medicine and Surgery of the University of Minnesota—The annual meeting and luncheon of this organization was held in St Paul, June 6 The following officers were elected Dr Louis B Wilson, Minneapolis president, Drs George B Head, Minneapolis, and Frank W Dean, Council Bluffs, Iowa, vice presidents, and Dr Warren A Dennis, St Paul, secretary and treasurer

Doniphan Brown (Kan) Medical Society—At the annual meeting of this Society composed of physicians from Doniphan and Brown Counties, held at Highland, May 30, the following officers were elected Dr William E Lewis, Highland, president, Drs Aaron Herring, Highland Station, and J H McGauhey, White Cloud, vice presidents, and Dr William Boone, Highland, secretary and treasurer

Connecticut River Valley Medical Association—The secretary of this association calls our attention to a mistake in the list of newly elected officers which appeared in THE JOURNAL of June 1, page 1576 The list should have been as follows Dr James A Craig Westmoreland, N H, president, Dr Frederick L Osgood, Townshend Vt, vice president, Dr J Sutcliffe Hill, Bellows Falls Vt, secretary, and Dr Edward R Campbell, Bellows Falls, Vt, treasurer

Delaware State Medical Society,—The annual meeting of this Society was held at Lewes, June 11 It was decided to hold the next meeting at Newark The following officers were elected Dr Edward D Dwight Smyrna, president, Drs Robert Ellegood, Delmar, and Harry G M Kollock, Newark, vice presidents, Dr John Palmer, Jr, Wilmington, secretary, and Dr William C Pierce Wilmington, treasurer The next meeting will be held at Newark

American Pediatric Society—The list of officers elected by this Society which appeared in THE JOURNAL last week is incorrect The correct list is as follows Dr Walter S Christopher, Chicago, president Drs Charles W Townsend, Boston, and John Dorning New York City vice presidents, Dr Samuel S Adams Washington, D C, secretary, Dr J Park West, Bellaire, Ohio, treasurer, and Dr Walter Lester Carr, New York City, recorder and editor

Alumni of Albany Medical College, Central New York Association—This branch of the Alumni Association was organized at Utica N Y May 29, with the following officers Dr Charles J Bacon, Fulton president Drs Earl D Fuller, of Utica, Eben A. Wood, of Syracuse, Irving S Edsall, of Middleville, William C Fawdrey, of Lorraine, Charles Bernstein of Rome and Arthur C Hagedon of Gloversville vice presidents, Dr Frederic H Brewer, Utica, secretary, and Dr Erwin J Cusack, Fulton treasurer

American Medico Psychological Association—The fifty-seventh annual meeting of this Association was held in Milwaukee June 11 to 14 The council recommended the establishment of a laboratory for medico psychologic research, in Washington Dr Robert J Preston, Marion, Va, was elected president Dr George A Blumer, Providence R I vice presi

dent, and Dr C B Burr, Flint, Mich, secretary treasurer Montreal was decided on as the next place of meeting

International Association of Railway Surgeons—The fourteenth annual meeting of this Association was held in Milwaukee, June 10 to 12 The following officers were elected Dr Rhett Goode Mobile, Ala president, Drs John A Barr, of McKeesport, Pa, Walter M English, of London, Ont, Lester Keeler, of Dronton, Ohio, Bacon Saunders, of Ft Worth, Texas, Samuel R Miller of Knoxville, Tenn, Benj Thompson of Tama, Iowa, and Albert L Peterman, of Parker, S Dak, vice presidents, Dr Louis J Mitchell Chicago, secretary and Dr James A Duncan, Toledo Ohio treasurer The Association will meet at St Louis next year

Association of American Medical Colleges—After ten years, harmony has been secured in this Association, at its annual meeting, in St Paul, June 3, by the admission to membership of twelve southern medical colleges, making a total membership of seventy seven Dr Victor C Vaughan, Ann Arbor, Mich, was elected president, Dr William L Rodman, Philadelphia first vice president, Dr H Bert Ellis, Los Angeles, Cal, second vice president and Dr Bayard Holmes, Chicago, secretary Kansas College of Medicine, Topeka, and University Medical College, Kansas City, Mo, which had been suspended for infractions of rules, were reinstated and the charges preferred against the Hospital College of Medicine, Louisville, Ky were not sustained

Maryland Public Health Association—The fifth annual meeting of this Association was held at Baltimore, May 23 A bronze mural tablet bearing a portrait of the late George H Rohe, was presented to the Medical and Chirurgical Faculty by Dr J S Fulton on behalf of the Association, and Dr Harry Friedenwald received the gift on behalf of the Faculty The tablet will be affixed to the wall in the Faculty s rooms on North Eutaw street The following officers were elected Mr Henry Brauns, Baltimore president, Drs James Bosley, Baltimore, Thomas B Owings Ellicott City, Clotworthy Birnie, Taneytown, Edward R Trippe, Easton, and Augustus Stabler, Brighton, vice presidents, Dr John S Fulton, Baltimore secretary and Dr L Gibbons Smart, Baltimore, treasurer

Rhode Island Medical Society—The ninetieth annual meeting of this Society was held at Providence, June 6 The annual address was delivered by Dr G Alden Blumer, Boston on "The Yesterday and To day of Mental Medicine" The following officers were elected Dr George F Keene Howard, president, Drs William R White Providence, and Christopher F Barker, Newport, vice presidents Dr Frank L Day, Providence recording secretary, Dr Herbert Terry, Providence, corresponding secretary, Dr Frederick T Rogers, Providence, treasurer and Edmund D Chesbro James H Davenport, John C Pegram Jr, George S Mathews and Frank E Peckham, all of Providence, board of examiners

Greene County (Ohio) Medical Society—The annual meeting of this Society was held in Xenia, June 6 The following officers were re elected Dr Asa C Messenger, Xenia, president, Dr T Marion Kent, Spring Valley, vice president, Dr Miron I Marsh, Cedarville, secretary, Dr David E Spahr, Clifton treasurer Dr John C Oliver, Cincinnati, was the guest of the Society, and read a paper on "Strangulated Hernia"

Tri County Texas Medical Society—The physicians of Covington, Blanton Blum, Heron and Kimball met at Blum, May 18, with Dr Joseph M Hanks, temporary chairman, and organized a society for the purpose of making a closer study of the science of medicine and up building of the profession in general The following officers were elected Dr James S Terrell, Blanton president, Dr Joseph M Hanks, Blum vice president, Dr C Gallaway Blum, secretary and Dr W H Maner Blum, treasurer

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CALIFORNIA ACADEMY OF MEDICINE

Regular Meeting held May 28 1901

Dr Philip King Brown in the chair

Pott's Fracture

DR HARRY M SHERMAN exhibited a patient on whom he had operated for the correction of the deformity which follows Pott's fracture The man had sustained a fracture in 1900 the usual deformity supervening after the splints were left off the foot going into valgus and equinus so that when it was put on the ground it touched only along the border of the big toe He corrected this deformity, and osteotomy was done on the inner malleolus, removing all the excessive callus which had been thrown out, and an open osteotomy was done on the fibula just below the point of the original fracture An achillotomy corrected the equinus The severed malleolus was now fastened to the shaft by a long nail, all wounds were closed, and the leg and foot put up in plaster Healing was uneventful When the splints were left off about eight weeks after the operation a little motion was found to exist in the ankle, and this has since slowly increased

Gangrene of Leg Following Confinement

DR C A VON HOFFMANN reported a case of a woman 28 years of age, with gangrene of the right foot and leg, which came on after an apparently normal confinement On the morning of the sixth day after her confinement she suddenly turned her head to the right and got a convulsion which lasted ten minutes, followed by three more, each one increasing in duration, the last persisting about an hour A catheterized specimen of urine showed albumin Two days later the patient turned suddenly to the right, but had no convulsion After about thirty minutes she opened her eyes, but could not speak Pencil and paper were given her and she tried to write She was able to write "I w" and continued to write w s, looked at it and shook her head, but could not speak She understood questions asked her perfectly After 15 minutes she motioned for pencil and paper again and wrote "I want you to tel" then put pencil down, and, commencing to write again, made only l's, looked at it, shook her head, and put the pencil down An hour later she pronounced the words "I want you to tell me how my baby is," hesitating between the words After that she continued to speak During this day the husband noticed dark purplish spots on her face The following morning she complained of intense numbness in the left leg, and swelling in the right leg could be detected The left leg became very dark below the knee and further down the right one showing the same changes, but not quite so intense, and later there was found to be loss of sensation in the toes which spread over the foot as far as the ankle During the first week after confinement the patient had suffered from asthma, but was free from it after the first convulsion The right leg continued to get worse until the patient entered the Children's Hospital At the time of entrance her pulse was 140, temperature 39 2 C, respiration 32, very much exhausted, breathing in a very labored manner, with burning pain in the right leg The whole right foot was gangrenous, but there was no line of demarcation The left foot had a dark spot over the instep, and on the heel The pulse in the left wrist could not be felt sensation was normal in the left foot entirely gone in the right She coughed a good deal, and this condition remained practically unchanged until Dr Sherman saw her five days later

DR H M SHERMAN reported that he saw this patient at Dr von Hoffmann s request on December 18, and found the right foot and leg gangrenous up to the junction of the upper and second quarters of the leg where a line of demarcation had formed The gangrene was dry, the toes being already desiccated About the left ankle were several areas of necrosis in the skin The tip of the fourth toe on the left foot was gangrenous Pulsation could be felt in each femoral, but not very well, chiefly because of the weak heart, but also because of the adipose tissue Pulsation could not be obtained in the left radial at the wrist The heart was weak rapid, and irregular, but there were no murmurs An acute nephritis was present, the urine containing albumin, hyaline, granular and blood casts and red and white blood corpuscles Wishing to wait for some possible improvement in the heart and kidney condition operation was temporarily deferred but was undertaken on the 28th The leg was amputated through the knee joint by a Stoke's modification of Gritte's amputation When the stump was dressed a week later the flap was a little dark colored but had adhered in its place, no pus, no hyperemia no tension or accumulation in the stump At the present time, five weeks after the operation the stump is fairly healed Examination of the leg showed post mortem clots in the arteries and veins by post mortem he meant clots that had formed after the death of the tissues by gangrene At the

point where the popliteal artery divides into the anterior and posterior tibials, was a larger, harder and firmer clot which he thought was an embolus which plugged the arterial circulation at that point, but as it had to be acknowledged that no cardiac lesion could be found to explain the formation of a hard clot it may be that it was an arterial thrombus and not an embolus The occurrence of superficial gangrene in the skin of the left ankle must have been due to a similar cause—embolic fragments plugging small arterioles, or thrombi forming in arterial branches

Amputation for Gangrene Due to Periarteritis

DR WALLACE I TERRY reported a case "Amputation for Gangrene Due to Periarteritis" in a man aged 31 by occupation a leather stamper who came to the City and County Hospital February 8 complaining of pain in the right foot and leg and gangrene of the big toe of the same extremity The following history was obtained He used alcohol moderately, cigarettes to excess Father died of cancer, mother of cholera He had had urethritis twice, epididymitis once Lues denied In 1887 both feet became swollen red and painful This attack lasted for six months A second similar attack came on a year later A third attack in 1894 with swelling of both legs, and a fourth in 1897, but only affecting the left leg He had some pain in both legs at times since then About six or seven weeks before admission, the right big toe became red and painful, apparently from an ingrowing toe nail Swelling soon extended up the foot and a couple of incisions were made by a physician on the dorsum of the foot On the day before admission the first phalanx became black Examination showed a rather thin neurotic individual Gangrene of the right big toe, swelling of the foot, great pain and tenderness in leg and foot Heart and lungs normal Urine normal, although patient stated that it had been very dark colored at times On the day after admission he disarticulated the big toe at the metatarsophalangeal joint, leaving the wound open The metatarsal bone was apparently sound Two days later the second and third toes grew dark in color and were soon gangrenous No further operative measures were deemed advisable until a more definite line of demarcation was established The foot was dressed antiseptically and kept warm By the beginning of March the lower third of the foot was gangrenous the process having gradually extended so an amputation of the leg at the lower third was done by Dr Huntington The stump healed well except for a small patch of gangrene on the posterior flap On May 27 1901, the patient had gained in weight and was looking well, but had had some pain in left leg within the past few days

DR H M SHERMAN also reported a case of "Amputation for Gangrene Due to Periarteritis" A man of 40 years of age, who had for several years suffered pain on the top of the left instep, which had been treated for rheumatism Apart from the pain his health had been good In October, 1896, he was suffering greatly, and thought he had an ingrowing big toe nail He was treated by a chiropodist, the result being a septic wound, which finally necessitated the amputation of the toe The stump, however, did not heal and the local condition progressing he finally lost all the other toes, except the little one In April, 1897, an ulcer came spontaneously on instep, which not healing, it was decided to curette it when the bone, being found very fragile and friable, an impromptu operation was done 5 inches above the ankle This stump also did badly, and another amputation removed 4 more inches of the leg This stump followed the course of the others, an ulcer persisted which would not heal under any treatment until the hot air baths were tried and under them it nearly closed, so that an artificial leg could be worn Sometime after, his stump became worse, and then his right foot began to pain him He then began the hot air baths for his stump and the ulcer fully healed, but the right foot was worse pain being complained of in the sole and instep An ulcer formed on the little toe for which the distal phalanx was removed, but this made matters worse Pus burrowed into the sole red swollen areas developed in the dorsum, and there was danger that the local sepsis would become more and more extensive so after incisions being made on the sole and dorsum without any relief amputation of the leg was done at the junction of the upper and middle thirds At this operation it was noticeable that there was no hemorrhage from the anterior tibial artery in general, the tissues of the stump looked darker than they should, and the blood from them was also darker than normal From then on healing proceeded uneventfully but slowly

DR A E TAYLOR presented pathological reports on the last two cases Dissections of the anterior and posterior vessels were done and it was noted particularly for the anterior vessels, that they were surrounded by an abnormal amount of connective tissue, which was very dense and unlike the normal areolar tissue usually found about the vessels The vessels were then measured and fixed Thrombosis was noted in both anterior tibial vessels, in both anterior veins and their subdivisions and in the posterior veins in the case of Dr Terry As compared to the normal these arteries displayed a great reduction in the total diameter, and a normal thickness of the wall with a great reduction of the diameter of the lumen Normal arteries of the same total diameter as these would have much thicker walls so that these walls, though apparently normal, were really increased in thickness In no case was the area of the diseased vessels as much as 1/10 of the normal area while in the anterior tibial vessels in Dr Terry's case it was but 1/100 Microscopic sections of the vessels showed the elastic tissue and the muscular coat to be qualitatively normal The intima was not notably thickened in either case except in the areas of thrombosis, where it was involved in the process of obliterative fibrosis No signs of lime salts could be found The endothelial cells lining the vessels were normal in the patulous portions The adventitia was thickened, it was usually well outlined from the surrounding excessive fibrous tissue In the areas of thrombosis the process was an obliterative arteritis The portions of the vessels not submitted to microscopic section were dissected The process of thrombosis did not extend along the entire length of the vessels involved, except in the case of the anterior artery in Dr Terry's case There were small portions in which the lumen was patulous These portions were carefully examined with a hand glass for areas of atheroma None were found The vessels were not at all tortuous but perfectly smooth and straight The veins presented no other lesions than the thrombosis

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THE CHICAGO LARYNGOLOGICAL AND CLIMATOLOGICAL SOCIETY

Regular Meeting, held May 2, 1901

Dr William E Casselberry, in the chair

DR JOHN EDWIN RHODES read a paper on "Some Interesting Throat Paralyses in a Case of Locomotor Ataxia of an Irregular Form" (See "Original Articles" p 1769)

DR OTTO T FREER—The paralysis of the crico arytenoideus posticus muscle, or abductor of the vocal cord, mentioned in the case reported by Dr Rhodes, is one that is characteristic of tabes dorsalis Felix Semon made this the subject of especial research, he finds that though there are some cases of total paralysis of the recurrent laryngeal nerve and also of the superior laryngeal as the result of tabes, these are rare exceptions compared with the great frequency of paralysis or paresis limited to the most vulnerable fibers of the recurrens, those that supply the crico arytenoideus posticus The paralysis may be uni or bilateral If unilateral there are no symptoms and the difficulty is only discovered during laryngeal inspection The affected cord can be seen fixed in the median position while the other one is abducted and leaves plenty of room for respiration Where the paralysis is bilateral, both cords are adducted but generally not so forcibly but that respiration can be carried on without marked dyspnea unless the patient exerts himself or catarrhal swelling closes the small chink of the glottis In some cases, however dyspnea is urgent and dangerous The voice is unimpaired

A second characteristic form of tabetic nervous disturbance of the larynx is the so called laryngeal crisis This presents varying grades of severity In the mildest form there are simply violent paroxysms of coughing which recur with great

obstinacy and for which no local reason can be found in the respiratory tract In the degree of next greater severity the coughing spells are accompanied by spasm of the glottis with severe dyspnea and tickling and scratching sensations with other laryngeal paresthesiæ The attack lasts from a few seconds to a few minutes and is intensely distressing In the severest cases the suffocation is sufficient to cause loss of consciousness, involuntary defecation and urination with epileptic seizures Even these grave attacks are seldom fatal

A patient in my care presents the mildest form of these three grades of laryngeal crises He has a paralysis of the third nerve with the characteristic paralysis of the ocular muscles in addition to the usual signs of tabes He complains constantly of paroxysmal cough, for which no local cause can be discovered in the respiratory tract

Dr Rhodes' paper is interesting in that it emphasizes what may in some cases be the earliest sign of tabes dorsalis, paralysis of the crico arytenoideus posticus muscle Paralysis of the abductors of the cords may be the first evidence of beginning locomotor ataxia If the laryngoscope were more generally used and especially if more pains were taken to become reasonably skilful in its employment this obscure and valuable sign would doubtless be discovered far more often than it is now, but as abductor paralysis does not alter the voice and as it does not always create noticeable obstruction to respiration, even if bilateral, it is sure to be overlooked if the larynx is not inspected The examination for suspected tabes should always include the use of the laryngoscope

DR E FLETCHER INGALS read a paper entitled "Diagnosis of Diaphragmatic Hernia" (See page 1770)

DR OTTO T FREER—Dr Ingals has mentioned me as one of those to whom he kindly awarded the privilege of seeing the remarkable case he has described Though there were times when the diagnosis pneumothorax seemed possibly correct to me, observation of the long course of the ailment and summing up of the signs observed makes me think that the case can only have been one of diaphragmatic hernia

Those who contended for pneumothorax have furnished no reasonable pathological basis for their opinion Tuberculosis was advanced as an etiologic factor The patient presented no evidence of tuberculosis He had no fever, no wasting and no general signs of tuberculosis He was a robust man in every respect and perfectly healthy with the exception of the affection under consideration

Another theory advanced explaining the occurring of pneumothorax was that the lung was adherent at some point to the chest wall and that deep inspiration had violently pulled on this place, causing a tear in the lung tissue This seems very unlikely when we consider the enormous frequency of pleuritic adhesions and the rarity of pneumothorax If a tear in the lung parenchyma of this kind had occurred it certainly could not have penetrated very deeply from so slight a traumatism and the little wound would have soon closed after the lung had collapsed in the region of the tear We know how soon similar openings in the lung tissue complicating rib fractures close when the chest wall has not been perforated Another argument against this theory is that at no time were we able to demonstrate the presence of fluid in the chest cavity, yet a rent of the lung tissue sufficient to cause a prolonged pneumothorax would surely have led to a pronounced hemothorax when we consider the very vascular pulmonary tissue A hemothorax would certainly have been followed by a pleuritic effusion as we know from clinical experience There is no history of hemothorax or pleuritic effusion in this case The rapidity with which bleeding into the pleural sac is followed by serous effusion I can illustrate by a case of my own in which the patient had stabbed himself with a penknife Within two days after the injury he had a marked collection of fluid in the pleural cavity that had been penetrated This subsided after about two weeks

The gurgling sounds I heard only on my first examination and I was surprised at their loudness and metallic character They were certainly as loud as I have ever heard them over the abdomen They were not frequent and I chanced to hear them while I was listening in the region just below the angle of the scapula The metallic tinkling or falling drop sound was loud and unmistakable, and when I was listening was rhythmical, occurring at intervals of a few seconds This sound could not have been produced in a pleural cavity that did not contain enough fluid for the drop to splash into, yet we never could demonstrate the presence of fluid in the pleural sac at any time The inference is that the drops were falling into fluid within some hollow organ in the chest cavity

The loud gurgling sounds were heard much higher in the thorax than it is usual to hear transmitted abdominal sounds and they were of surprising intensity It was contended that a pneumothorax would favor transmission of these noises Air in the pleural cavity certainly does not favor conduction of respiratory sounds to our ear, therefore I can not understand why it should favor transmission of abdominal ones Respiratory sounds are far better carried by the parenchyma of the expanded lung Fluid is even a better conductor than air and yet we know how a pleuritic effusion will dampen and suppress sounds from the lung

To explain the rather sudden appearance of the symptoms of diaphragmatic hernia in this case we must assume that a small hernia had existed for a long time and that it had gradually enlarged to a point which made its sudden increase from a slight cause easy

DR JOHN EDWIN RHODES—I wish only to say that I appreciate very fully the care with which Dr Ingals has investigated this case, and the strong argument that he has advanced in favor of diaphragmatic hernia I could not fully decide that it was a case of diaphragmatic hernia, although my findings were much in favor of it rather than that of pneumothorax The reasons for believing that it is a case of diaphragmatic hernia have been clearly stated by Dr Ingals from the examinations I made and the points that have been brought out by him I am inclined to accept his diagnosis

DR WILLIAM E CASSELBERRY—The essayist has made an excellent argument in favor of a diagnosis of diaphragmatic hernia I must confess to being, as yet unconvinced Of course conviction in such a case is difficult from a mere report without seeing the case itself, no matter how carefully the details are given

What impressed me as faulty in the diagnosis of diaphragmatic hernia is the disappearance of the intestinal gurgling sounds late in the case and that while they were present early and were heard by both Drs Ingals and Freer in their first few examinations, in later examinations they failed to hear these sounds If there was a loop of intestine, colon, or stomach that passed through the diaphragm I do not see why there should not be nearly all the time, when digestion was in progress, some gurgling or bubbling sound I would suggest in this connection that, if opportunity offers the patient be given a cathartic, and that an examination be made at the proper time during its action, under which circumstances the gurgling sounds one would expect to be increased very markedly in frequency and intensity, and with unmistakable identity to the well known gurgling sounds which are heard over the intestine Again Dr Freer has referred to these or other sounds as "metallic tinkling" "Just like a drop falling into a bottle of fluid" Now, there is really no similarity between the sounds of intestinal gurgling or stomach splashing and real metallic tinkling in pneumo hydrothorax Is it not possible that both were present and that the gurgling sound was simply transmitted from the colon in its normal situation?

In favor of diaphragmatic hernia would be the total absence of fluid from the pleural cavity for, as remarked by the essayist, communication of the bronchial tract with the pleural cavity almost certainly leads to infection and effusion Without fluid in the pleural cavity the sound could not have been real metallic tinkling I must say, however, that I believe it would be possible for a small amount of fluid to be in the pleural cavity without causing distinct physical signs and without being caught by an aspirating needle I am quite certain that I have aspirated unsuccessfully at times in cases of pleurisy with slight effusion In other words, I have failed to get the fluid which I believed to be there I know it is difficult to do these things, but if aspiration had been made

more than once not depending upon a single aspiration I would have more confidence in this test

DR INGALS—Aspiration was made twice

DR CASSELBERRY—I accept that statement as being a further verification of Dr Ingals' diagnosis of diaphragmatic hernia except that the fluid might have escaped even a double aspiration

A point in favor of diaphragmatic hernia is the variation in the position of the heart not that the heart was merely at first pushed far to the right, and late in the case to the left which might have been caused by a continuous absorption of air from a possible pneumothorax but that it was one time far to the right and the next time to the left arguing as Dr Ingals has said in favor of a variation in the amount of distention by the loop of intestine or stomach that happened to be through the diaphragm Yet even with this sign one can conceive of a small bronchial perforation having forced through it into the pleural cavity at different times a varying quantity of air dependent perhaps upon the degree of respiratory activity

DR MORLEY D BATES—The patient told me that at one time he felt as if something gave way in his chest on the left side, in the region of the third interspace, and that he felt a sensation of air blowing through the opening thus produced It was a whistling blowing sensation on deep inspiration, and at times it would subside, after which he thought the heart was pushed farther to the right I do not know whether that point was mentioned or not

DR INGALS—I think I mentioned that the patient often felt a splashing sensation and at one time, shortly before the last examinations were made he spoke of having felt something give way, pushing his heart to the right side

DR BATES—When I examined him I heard a gurgling sound in the lower portion of the thorax, on the left side, but I think these sounds were transmitted in a measure from the distended intestine or from the stomach I heard them low down, not up any farther than the sixth rib

DR INGALS (closing the discussion)—The patient never had any evidences of pleurisy, there was no collapse of the upper portion of the lung at any time The area of vesicular sounds present varied from one to two inches at the lower part of the acting portion of the lung which could not have been the case with air in the pleural cavity In answer to Dr Casselberry I may say that it was suggested that the patient take a cathartic but he did not care to do so I heard the gurgling sounds on several occasions but at many of the examinations I did not hear them

PHILADELPHIA ACADEMY OF SURGERY

Meeting May 6, 1901

President Dr DeForrest Willard in the chair

Empyema

DR R H HARTE reported five cases and exhibited three of the patients Two patients had suffered from pleurisy with effusion, the fluid subsequently becoming purulent In these two cases the temperature ran a zigzag course, one being regular the other more sharply defined As to the measures to be adopted in these cases he believed in the resection of portions of two or three ribs and subsequently inserting an extra sized drainage tube A very large tube is always necessary, since smaller ones become easily occluded by flakes of lymph Frequently these flakes of lymph may wall off a collection of fluid within the pleural cavity and produce a rise of temperature To break up these pockets so produced a metal sound had been of advantage As to the incision he preferred one made in the mid axillary region This incision might be vertical or curved In one of the cases he had made a longitudinal incision In old cases of empyema the incision of Godley frequently gives good results In empyema it is astonishing how quickly the patients improve after the operation

DR R G LECONTE had seen two of these cases previous to operation and agreed that they had been desperate ones He also believed in resection of the ribs to permit drainage In those cases where there was a very extensive collection of fluid, a preliminary puncture might be resorted to previous to the resection of a rib

DR W J TAYLOR stated that several years ago he had been called out of the city to see a case of empyema in which there had been a very large collection of fluid present In this instance he had made an incision under the breast, thus allowing drainage to occur Later he had resected a rib, thus effecting a cure In this case considerable purulent material had drained off

DR H R WHARTON believed in resection of a rib in empyema, and also thought that a very large drainage tube was advisable In the case of children he did not believe that immediate resection of a rib was advisable, simple drainage usually being effective In cases of empyema of long standing or in those cases where a sinus exists he resects a rib at the primary operation

DR G G DAVIS does not believe in irrigation of the pleural cavity at the primary operation In some instances in which the cavity communicates with a bronchus, this might be a dangerous process

DR J H JOPSON had treated five cases of empyema of children recently In these instances, simple drainage had given relief

DR DEFORREST WILLARD believed in the resection of a rib in children, since in these instances the ribs were so closely placed together that drainage was not always effectual As to irrigation, he never resorted to this procedure unless the purulent material had an odor

DR HARTE, in closing stated that as a rule he generally resected a rib in empyema of children, the same as in adults As to irrigation, he disapproves of it He prefers ether as an anesthetic

Ligatures of External Carotid, one for Hemorrhage after Tonsillotomy, the Other for Hemorrhage after Intranasal Operation

DR W W KEEN believed that as a rule ligation of the external carotid artery presented no serious difficulty In Case 1 the patient aged 22 years, had suffered from hypertrophy of the tonsil which had subsequently been removed with a tonsillotome At the time of operation no special hemorrhage had occurred, but three hours later hemorrhage had been profuse, requiring ligation of the external carotid In Case 2, Mr M B several years previously had had a polyp removed, and at the present time was suffering from a hypertrophic process affecting the septum This growth was curetted by a physician, and sharp hemorrhage occurred, about 20 ounces of blood being lost The nares were firmly packed, but more or less oozing still continued Nearly all known remedies were tried to stop the hemorrhage without relief These remedies included the actual cautery, trichloracetic acid gauze packing, ham fat adrenalin, but hemorrhage continued for several weeks, the patient losing in all probably 10 pints of blood At last ligation of the external carotid was done, and hemorrhage at once ceased Recovery in both instances was prompt

Cases of Facial Anthrax Treated by Injections of Carbolic Acid

DR L H MUTSCHLER referred to certain cases of anthrax which had been reported before the Philadelphia Pathological Society by Dr J H Jopson in December, 1899 In the first one of the speaker's cases the man had been 21 years of age, and had been handling goat skins imported from China After some time a pimple had developed over the eyebrow and in the center of this pimple a dark spot had occurred Surrounding this was considerable edema though little pain was present The temperature remained about 99 2 F In this case a solution of carbolic acid of 95 per cent had been injected in eight localities surrounding the initial pimple and later a bichlorid dressing was applied, and on the third day the slough separated and recovery occurred

In Case 2 the patient had been a man 44 years of age and had been employed in a factory in which he had to handle goat skins These products had been imported from Russia In this instance a spot developed on the face causing edema

of the neck scalp and jaw In this instance the edema had been confined to one side of the neck, but there was no glandular enlargement A black slough occurred in the center of the region affected There was no pain accompanying the part involved Pure carbolic acid when injected around the site of disease effected a cure In both cases pure cultures of the anthrax bacillus were found which, when injected into mice caused death within 13 hours The speaker had wondered why the Government had taken no action to prevent the importation of infected hides

DR J H JOPSON referred to the cases of anthrax he had reported Up to this time there had been ten cases of anthrax reported in Philadelphia and doubtless there had been many cases throughout the country which had never been recognized

DR J CHALMERS DACOSTA had seen two cases of anthrax one of which he had mistaken for malignant edema

DR W J TAYLOR had seen the first case reported by Dr Mutschler and stated that after the injections of carbolic acid recovery had been prompt

DR R H HARE wondered why it was the habit of hospitals not to admit these cases He desired to go on record as believing that they should be admitted to hospitals

Ultimate Result in a Case of Interscapulo thoracic Amputation

DR R G LECONTE reported the case which had been reported before the society at a former meeting It was one of sarcoma affecting the left shoulder and of a recurrent type During a part of 1899 patient s health had been good, but in January, 1901, another operation had to be performed, at which time a portion of a rib was removed Some time later asthmatic attacks developed with bloody expectoration small pulse, dyspnea and finally death occurred Feb 25, 1901 At the post mortem examination pleural adhesions were found The apex of the right lung showed fibroid degeneration In the right lung a growth the size of an orange was found The liver showed fibroid change and the spleen showed whitish growths The tumor of lung when examined microscopically was found to be made up of spindle cells with spindle shaped nuclei and with nucleoli Dense hyaline degeneration products were found over the spleen Some giant cells were also found It is somewhat remarkable that this tumor had affected the left shoulder in the beginning of the attack, and afterwards had given metastasis in the right lung

TRANSACTIONS OF THE WOMAN S HOSPITAL SOCIETY OF NEW YORK

May Meeting, 1901

Dr Joseph E Janvrin in the chair

A New Method of Nephrorrhaphy

DR P F CHAMBERS read a paper with this title and said that although he had not been able to learn of any practical objections to the method in vogue of fixing the kidney by needle and suture passed through the cortex, theoretically he had always been opposed to it, and he felt assured that, sooner or later cases would appear showing that an injury had been done, to the kidney Only a few years ago it was thought perfectly safe to leave a permanent suture, such as silkworm gut or silver buried fastening the kidney to the back muscles That was soon proven to be a fallacy He could not see the advisability of leaving the wound open for granulations, for, after all it is simply the surface of the kidney which adheres, and it is held no more firmly whether the surface to which it is adherent be granulation tissue 2 inches thick or merely the adhesion which would take place between two raw surfaces

His cases were of two unmarried women who were admitted to his service in the Woman's Hospital with markedly displaced or floating right kidneys, and with all of the symptoms attending such trouble An operation for fixation was unquestionably advised in both cases and performed according to the following method

The patient being placed in the usual position on her side and abdomen, the vertical incision was made and the kidney caught with the fingers and pulled through the opening Then with the forefinger and thumb of the left hand as a guide, a bunch of median sized catgut was carried around the kidney by a Cleveland ligature carrier This was carried around the kidney just below the pelvis, between the kidney and the ureter Then, with the same carrier, the sutures were carried through the muscular fibers, or aponeurosis, in the upper edge of the wound The sutures were then temporarily left until the capsule of the kidney could be cut and pushed back about half an inch on each side of the incision With fine catgut the capsule was drawn back and fixed to the under surface of the muscle The bunch of catgut sutures was then tied, holding the kidney firmly up against the under surface of the muscle to which it was wished to have it adhere. The muscular fibers which had been torn and the muscular fascia were brought together with a running suture of catgut The wound was then thoroughly washed out with a normal salt solution and closed with catgut The patient was put to bed on her back and the foot of the bed slightly raised and she was kept in that position for at least two weeks By that time the catgut had been absorbed and the wound healed She was gradually allowed to assume the sitting posture and, at the expiration of three weeks she was allowed to leave her bed But before allowing her to assume the upright position a snug fitting abdominal supporter was adjusted and she was directed to adjust it before leaving the bed for at least a year No injury had been done the kidney The operation was attended with no danger and with but little inconvenience to the patient Median sized catgut was used just large enough to prevent cutting into the kidney tissue and sufficiently large to suspend With the finger in the incision, passing it around the kidney, feeling that the ureters and blood vessels were out of the way, all outside of the proposed line of suturing, the sutures were then passed around the kidney, hugging it closely, outside its capsule, between it and the ureter The sutures penetrated into the fatty and cellular tissue When the sutures were tied they were tied higher up than the level of the plane of the kidney so as to keep the kidney pushed up underneath the ribs Dr Senn's method was similar to this but he used gauze which was passed around the kidney The wound was left open and the gauze removed at the expiration of three or five days, of course, in such an instance, the wound had to heal by granulations When the capsule was pulled back it was sewn to the under surface of the muscle and so attached by its raw surface, and that was the only part of the kidney that becomes adherent Even when you penetrate the kidney with a needle armed with silkworm gut, with catgut, or other material, the object simply was to hold it there until adhesions took place, when the sutures are withdrawn His sutures, which suspend the kidney in position, last fully as long as those sutures which penetrate the kidney tissue itself He had never seen any injury, nor did he know of any case, where any injury had been done the kidney by the old method, but theoretically he had always been opposed to it He did not think we could pass a ligature through the kidney without injuring it He thought the method described of holding it in place did equally as well, and was a better procedure than when the kidney tissue was penetrated

DR GEORGE H MALLETT said that the question of floating or movable kidney interested him very much He had not settled in his mind the value of the operation as a means of relief A good many men have stated that 20 per cent of all the patients who apply for gynecologic treatment are cases of floating kidney

A Case of Utero Intestinal Fistula

DR L GRANT BALDWIN read a paper with this title He wished to report the case on account of its rarity and the results obtained This occurred in a woman, about 37 years old, who was confined in April, 1900 About the third day after her confinement she became septic, and was then curetted by her family physician, who was a most competent obstetrician Nothing untoward happened and the symptoms of sepsis disappeared At the end of the tenth day after the curetting, fecal matter was noticed coming through her vagina

At the end of two weeks after the curetting he was asked to see her At that time she had a temperature of 101, pulse 120, foul tongue, and she looked rather wretched The physician had told him that fecal matter appeared through her uterus, but he was inclined to be rather skeptical, thinking that the fistula was in the vagina By placing the patient in the Sims position and thoroughly exposing the parts, fecal matter could be seen oozing out of the cervix Her bowels had not moved by way of the rectum for several days Intestinal gas passed through the uterus There was a mass one half the size of a fetal head in the left iliac fossa immediately connected with the cul de sac There being no inflammatory material present, and the patient being in fairly good condition, it was thought advisable to wait and keep the uterus and vagina as clean as possible The fever and pulse began to get less, her appetite improved and, at the end of two weeks after that, some little gas passed by way of the rectum She gradually improved, and in the early part of June went to the country About the middle of July he was told that fecal matter had not passed by way of the vagina for several days She gained in flesh and her condition became most satisfactory When she returned from the country, about the middle of September, she had gained 20 pounds in flesh, and she was the picture of health Except for a little thickening back of the uterus on the right side she is a perfectly well woman and has menstruated for two months normally, a normal amount, and without pain

The question as to how this condition occurred and how it healed up was an interesting one to him, and his only opinion was one of speculation Probably the uterine wall was injured at the time she was curetted and a localized peritonitis occurred with adhesions of the bowel to the sigmoid flexure because by rectal examination nothing could be felt It must have occurred low down, because the fecal matter was not the contents of the small intestine, the food was thoroughly digested and resembled the products of digestion As the uterus contracted, as involution went on, the sigmoid remaining stationary, the opening was stretched out into a canal and as the uterus went down further and further in the pelvis, it still more stretched and finally became obliterated in that way That is the most probable way in which healing occurred that he could imagine

DR J DOUGAL BISSELL asked Dr Baldwin if she had ever had a laceration and if it was an instrumental delivery

DR BALDWIN replied that there was an old laceration of the perineum and cervix, but it was not marked There were no symptoms of rupture of the uterus present whatever The labor was a normal one The curettage was done for the sepsis

DR P F CHAMBERS asked if a sharp or a dull curette was used because he thought the sharp curette was a most dangerous instrument After parturition he had made it a rule never to use it He had seen a number of cases where he had been satisfied that injury had been done by the sharp curette The sharp curette cuts in soft tissue and leaves a number of raw surfaces for the absorption of septic material The dull curette will do everything that the sharp one does, and does no harm

DR JOSEPH E JANVRIN did not think one should ever use the sharp curette after confinement, on account of its danger Personally he never used it but always the dull curette, using a good big one which is large enough to catch hold of anything contained within the uterine cavity and pull it down The instrument that he liked was called Munde s, which was very light, but larger than the Thomas curette Any case where the uterus is subinvoluted and with the cavity quite large required a good sized blunt instrument to get hold of and pull down any material within that organ

DR S SHAILER suggested as a cause of the fistula that perhaps it was due to the gut passing into the cavity of the uterus through an opening made by the curette, the pressure externally pushing the bowel in The adhesion formed between the bowel and uterus was so firm that the feces did not get outside the uterus into the peritoneal cavity, so accounting for the non appearance of peritonitis

NEW YORK ACADEMY OF MEDICINE —SECTION ON PEDIATRICS

Stated Meeting May 9, 1901

DR W L Stowell in the chair

An Investigation of Adenoids, Especially with Reference to Bacterial Infection

DRS M NICOLL JR, and A J LAPTIGAU had made a careful bacteriologic investigation of 11 adenoids, with the result that 5 of the specimens gave sterile tube and plate cultures, while the remainder showed a few micro organisms, chiefly streptococci Where tests had been made for virulence, these organisms had been found to be non virulent They had also examined 75 adenoids for tuberculosis, using half of each specimen for inoculation experiments and half for microscopic study Of the cases 10 per cent contained both tubercle bacilli and the histological lesions of tuberculosis, while 5 3 per cent contained tubercle bacilli without any definite lesions of tuberculosis At least 10 sections had been examined from each adenoid This investigation also comprised a study of 46 specimens with regard to the thickness of the epithelium From this it was learned that of the 46 specimens studied, 13 showed a normal thickness of epithelium, and the others great variations from the normal In the specimens containing tubercle bacilli these organisms were in all situated rather near the surface and it appeared that the adenoid had become infected from the surface without any break in the epithelium

DR NICOLL commented on the significance of the fact that 10 per cent of these cases had shown tubercular foci in the respiratory tract He was inclined to think that in the near future tubercular adenoids would assume a more important rôle than previously

A Dozen Cases of Spinal Analgesia in Operations on Children Under Six Years and a Half

DR W S BAINBRIDGE had used this method of inducing anesthesia in various operations upon children, including osteotomy, circumcision, cauterization of the rectum for prolapse, and the radical cure of hernia The youngest of these patients was four months He had carefully compared the action of cocain and beta eucain, and had demonstrated that the latter was unreliable and very unsatisfactory The speaker said that he had reported the only two cases in literature in which subarachnoid injections of cocain had produced a complete analgesia of the entire body

DR J LEONARD CORNING said that he had carefully refrained from saying much in the recent discussions of this method yet he felt that it was not likely to be discarded by surgeons For that very reason it should be thoroughly studied, and it was quite probable that it would be considerably modified He had endeavored himself to do this, as, for example, by varying the specific gravity of the fluid injected and by substituting cataphoresis for puncture of the membranes

DR CHARLES M FORD, who had witnessed most of Dr Bainbridge's operations under cocain analgesia, emphasized the value of the method in children, and commented upon the remarkable calmative action of the cocain injection even in very nervous and apprehensive children

DR W E YOUNG said that as house surgeon of the hospital in which these operations had been done he had had an excellent opportunity of watching these patients for a number of months Bad effects had not been observed, and rarely any great variation in the body temperature Ethyl chlorid had been used in connection with the injections of cocain, and although the injections had been given at varying levels, it had not greatly affected the result Anesthesia had been induced in periods varying from half a minute to fifteen minutes after the completion of the injection All of the patients had retained tactile sensibility and the ability to distinguish between heat and cold, but none had experienced pain from the application of the actual cautery The only unpleasant sequela had been headache, and this could be quickly relieved

by the hypodermic injection of 1/100 of a grain of nitroglycerin and could sometimes be altogether prevented by the previous administration of bromid of sodium Most of the patients had been able to retain food within a few hours and had slept well the first night In no case had there been infection

DR J H LARKIN said that he had been called upon to make an autopsy upon an apparently healthy woman who had suddenly died six hours after the removal of her tubes and ovaries under analgesia induced by intraspinal cocainization The respiratory apparatus and all of the viscera had been practically normal, and the same was true of the brain Corresponding to the site of injection was a punctate mass involving the periphery of the cord

DR BAINBRIDGE said that he had carefully studied the 1080 reported cases and had been unable to find a death wholly attributable to this method If the injection were made very low down the cord could not be injured

CHICAGO PATHOLOGICAL SOCIETY

Meeting held May 13, 1901

The president, Dr L Hektoen, in the chair

The Cellular Changes in Tubercular Meningitis

DR I B DIAMOND stated that plasma, lymphoid and phagocytic cells form the greater portion of the cell infiltrations in the vascular and extravascular areas of the leptomeninx in acute tubercular meningitis The plasma and lymphoid cells emigrate largely from the lymph spaces of the arterial adventitia and from the finer capillaries They proliferate largely by indirect division, a certain number, however, are derived from lymphoid cells There are two kinds of phagocytes, 1 those which proliferate from the endothelial lining of the capillaries and lymph spaces, and 2, those from the subendothelial intimal connective tissue

The most important of the vascular changes—the tubercular endarteritis—develops in the following manner Plasma and lymphoid cells accumulate underneath the endothelium of the intima, later the subendothelial intimal connective tissue cells are found mixed with the former They proliferate next to the elastic coat, are to a certain degree phagocytic and resemble epithelial cells They also run together and form giant cells, and in this manner characteristic intimal tubercles develop Changes of the endothelial lining of the arteries occur later, especially when there is caseation or hyaline degeneration of the collection underneath

Of interest is the great production of plasma cells which is analogous to the cell changes described by Councilman in acute interstitial nephritis, while on the other hand, the production of phagocytic cells is analogous to the cell changes described by Mallory as occurring in typhoid fever

Bubonic Plague Specimens

DR LEWELLYS F BARKER presented gross and microscopic specimens of the buboes and internal organs removed from Chinese, dead of plague, in San Francisco The demonstration was accompanied by a brief description of the pathology and pathogenesis of bubonic plague In the bubonic form of the disease the lesions in the lymph glands and surrounding tissues—edema, hemorrhage and necrosis—are very characteristic The changes in the spleen are more marked in the septicemic form than in the bubonic form The specimen of spleen under the microscope showed extensive necrosis of the splenic framework and pulp, with wandering in of polymorphonuclear leucocytes

Primary plague pneumonia is distinguished from aspiration pneumonia and from embolic pneumonia occurring as complications of plague The enormous number of bacilli present, the abundance of blood in the exudate, and the small part played by fibrin are interesting features

The question of portal of entry was discussed in connection with the various clinical types, and an effort was made to explain the fact that local lesions in the skin and mucous membranes and lymphangitis are rarely present, the first outspoken lesions occurring in the nearest packet of lymph glands

Ovarian Follicles

DR LEO LOEB demonstrated microscopic sections showing the difference between the atresia of follicles in different stages of maturity, also microscopic sections of two ovaries of a guinea pig in which all follicles presented the picture of hypertrophy of the epithelium and in which the atresia without exception started by the ingrowth of connective tissue and capillaries into the follicular epithelium Two slides were demonstrated showing follicles in the process of atresia, each one of which contained two ova In one of these two follicles both eggs showed progressive changes, in the other follicle one ovum was unchanged and well preserved, the other ovum was segmented In a third atretic follicle, of which a slide was shown in which three ova were present, two of these were unchanged, the third ovum had undergone certain changes, the exact nature of which could not with certainty be determined Another specimen showed a structure resembling very much a small corpus luteum, in the center of which, however, two successive sections demonstrated the presence of an ovum At present it must be left undecided, if in this case the ovum of a ruptured follicle was retained and a corpus luteum had formed around it, or if under certain conditions a follicle which had not ruptured previously might in the stage of atresia give rise through hypertrophy to a structure similar to a small corpus luteum

Gastrolith

DR MAXIMILIAN HERZOG presented a gastrolith composed of persimmon seeds which had caused perforation of the stomach and death in a 3 year old boy in the practice of Dr Cargile, of Bentonville, Ark

Therapeutics

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice Proper inquiries concerning general formulae and outlines of treatment will be answered in these columns]

Treatment of Neurasthenia with Anemia

Dr J P Miller recommends the following in the neurasthenic state accompanying disturbances of the gastro intestinal tract

℞	Ext Sumbul	gr i	06
	Asafetidæ	gr ii	12
	Mist Blaud	gr iii	18
	Acidi arsenosi	gr 1/30	002
	Strychninæ sulphatis	gr 1/60	001
	Phosphori	gr 1/100	0006

M Sig One such pill three or four times a day on an empty stomach

For Tympanites in Infants

℞	Sodii sulphocarbolatis	gr v	30
	Syr aurantii amari	ʒiss	6
	Aq menthæ pip	ʒvi	24

M Sig One small teaspoonful three times a day

Treatment of Psoriasis

E J Angle, of Lincoln, Neb, states, in *Western Med Rev*, that arsenic should never be given during the acute stage of psoriasis, but when once determined upon it should be continued for several months or even years The initial dose should be small and taken after meals, well diluted He prescribes arsenic in the following form

℞	Liq potass arsenitis	ʒii	8
	Aq menth pip, q s ad	℥iv	128

M Sig One half to two teaspoonfuls after each meal in water, or

℞	Acidi arsenosi	gr ii	12
	Pulv piperis nigræ		
	Pulv glycyrrhizæ rad āā	gr xl	2 66

M Ft pilulæ No xl Sig One pill after meals

Treatment of Tuberculosis

The following is recommended by Fliesburg, to be given hypodermically

℞ Iodi puri cryst	gr xxiiss	1	50
Phosphori puri	gr iv		25
Thymol			
Menthol āā	gr xl	2	66
Guaiacol	gr xx	1	30
Ol Morrhuæ steril	ʒiss	50	

M Sig Inject one to three syringefuls once daily every four to eight days

Treatment of Infantile Eczema

Kistler in *L Med Rec* recommends the following as an ointment, in infantile eczema, to relieve the itching

℞ Acidi salicylici	gr xv	1	
Bismuthi subnit	ʒiv	16	
Pulv amyli	ʒiss	48	
Ung aq rosæ	℥ii	64	

M Sig To be applied locally

He also recommends the mild chlorid of mercury to be given twice a week to increase elimination from the bowels and kidneys

Treatment of Chronic Purulent Otitis Media

In the treatment of a case of chronic purulent otitis media Dr J F McKirnon, in *Med News* states that we should keep three objects in view 1, the cure of the otorrhea, 2, the improvement of the hearing, 3 the relief of the distressing subjective sounds if present After thoroughly cleansing the ear he advises the following as a non irritating germicide, which has been of benefit in his hands

℞ Acidi boracici	gr xx	1	33
Sol hydrarg bichlor (1 1000)	ʒii	8	
Spts vini rectificati q s ad	℥i	32	

M Sig Cleanse the ear thoroughly

In cases where there is a large amount of granulation tissue present he recommends a solution of adrenal tissue as an application especially when it is properly applied to the base of the growths

The Preventive Treatment of Hepatic Colic

According to Chauffard, in the *St Louis Med Rev*, among the best medicaments for preventing attacks of hepatic colic are the salicylate and benzoate of sodium He administers the following, varying the dose according to the severity of the case

℞ Sodii salicylatis			
Sodii benzoatis āā	gr ii		13

M Ft capsula No i Sig One such capsule at meal time

He is in the habit of adding to the above combination, one or two grains of Carlsbad salts This treatment he continues for ten or twenty days in the month, for a year or longer He states that if this line of treatment is persisted in a cessation of the crises will be obtained

Acne

Dr Allen in *Post Grad*, states that disturbances in uterine function is often a cause of acne in women Especially is this the cause in the variety limited to the region of the mouth and chin He recommends in such cases, the following

℞ Ext ergotæ fluid	ʒiiss	10	
Tinct. ferri chloridi	ʒiss	6	
Glycerini	℥ss	16	
Ext cascaræ fluidi	ʒi	4	
Syr simplicis	℥ii	64	

M Sig One teaspoonful three times a day in water

In cases where the superficial epidermis has been rubbed off leaving the follicles exposed to local infection, he recommends the following

℞ Ichthyol	gr x		66
Resorcin	gr x		66
Pulv calamine	gr xx	1	33
Ung zinci oxidi	℥i	32	

M Sig Apply locally three times a day

Erythematous Eczema

In cases of erythematous eczema Dr Allen advises the following

℞ Pulv calamine præp	gr xx	1	33
Zinci oxidi	ʒss	2	
Glycerini	ʒiii	12	
Aq camphoræ	℥iv	128	

M Sig Shake apply locally and allow to dry

Dermatitis Following Trichophytosis

In dermatitis following ringworm of the scalp in children he uses the following

℞ Acidi carbolici	gr x		66
Ung picis liq	ʒii	8	
Ung acidi borici	ʒvi	24	

M Sig Spread upon a piece of gauze and apply to the bald areas After the dermatitis has subsided an application of chrysarobin or ointment of ammoniated mercury may be substituted

Local Application of Guaiacol

The *New Eng Med Month* recommends guaiacol applied locally as a safe and reliable remedy in relieving pain of arthritis deformans, acute or muscular rheumatism, sciatica, orchitis, and epididymitis One part of guaiacol to ten or fifteen parts of vaselin or lanolin should constitute the application

For Insect Stings

The following applications are recommended by Bernbeck, in the *Jour des Practiciens*, as acting promptly in allaying the pain and inflammation of insect stings

℞ Collodion (flexible)	ʒx	40	
Acidi salicylici	ʒi	4	

M Sig Apply locally, or

℞ Collodion	ʒiii	12	
Hydrarg chloridi corros	gr iss		09

M Sig For local application

For the Removal of Corns

℞ Acidi salicylici	ʒi	4	
Acidi lactici	ʒi	4	
Cerati simplicis	ʒviii	32	

M Sig Apply locally night and morning

Or

℞ Acidi salicylici	ʒi	4	
Resinæ	ʒii	8	
Adipis	ʒiv	16	
Olei amygdalæ dulcis	ʒii	8	

M Sig Apply locally

Seasickness

The following is recommended by the 'Encyclopedia of Med" in treatment of seasickness

℞ Acidi citrici	ʒii	8	
Aq destil	ʒiv	16	

Misce and mix with

Potassii bromidi	ʒi	4	
Potass bicarb	ʒi	4	
Aq destil	℥iv	128	

M Sig Combine a tablespoonful of each and drink while effervescing

Three days before sailing and for three days after, the following

℞ Ext taraxici			
Ext colocynthidi co āā	gr xx	1	33
Ext hyoscyami	gr iii		18
Ext nucis vom	gr v		30
Massæ hydrarg	gr xv	1	

M fiant pil No xx Sig One or two pills to be taken at night

FOR THE NAUSEA AND VOMITING

℞ Spts chloroformi			
Tinct. nucis vom āā	gtt x		66
Tinct. lavendulæ comp	ʒi	4	
Aq destil	ʒx	40	

M Sig Shake and take a teaspoonful every hour until vomiting has ceased

Medicolegal

Bars Opinion from Appearance at Time of Treatment — The Supreme Court of Michigan holds, in the case of Rose vs the Supreme Court Order of Patricians that the statute will not allow a physician to give an opinion based upon the appearance of a patient at the time of treatment The case, it points out is very different from where the physician was not asked for any information or knowledge of the patient's appearance while he treated him, but, having seen him many times after his employment had ceased was asked for an opinion based on patient's appearance, expressly limited to the latter period

Compensation to be Fixed by Board of Health —The Supreme Court of Michigan in explaining the case of Pease vs the Common Council of the City of Saginaw, says that the party bringing it a physician, under the direction of the board of health of the city, had performed professional services for the city in certain contagious disease cases He presented his bill for $480 to the board of health and that body allowed it at that sum The bill was then certified to the controller and the committee of the council on finance and auditing who, after taking testimony as to the value of the services, reached the conclusion that the usual charge was $3 per visit, instead of $5 as charged in this bill, and thereupon reported to the common council recommending that the claim be allowed at $292 and that the latter sum be tendered in full settlement of the claim This recommendation was adopted by the common council, the bill was allowed at that sum, and the order drawn therefor was accepted Subsequently a petition for mandamus was filed, and it is in that case which the Supreme Court of Michigan here holds that an order should be entered directing the council to pay the amount found due by the health board It holds that inasmuch as the ordinance creating the city board of health provided that the latter should possess all the powers and perform all the duties imposed upon boards of health of townships, that the value of the services of a health officer must be determined by the city board of health the board of health in townships being empowered to fix the compensation of health officers and to audit all fees and charges of persons employed by them in the execution of the health laws and their own regulations Nor does it consider that this was rendered otherwise by a provision in the city ordinance mentioned that any and all expenses incurred by the health officer or assistant health officers in the removal or abatement of any nuisance or in the putting of any premises in a sanitary condition should be certified to the city controller, and should be audited and paid in like manner as other claims against the city, etc And the acceptance of a part of the amount fixed by the board of health the court holds will not preclude the health officer from receiving the whole

Prohibiting Burials Within City Limits —The Supreme Court of Oregon says in the case of Wygant vs McLauchlan, that a cemetery is not a nuisance, except conditions be present which corrupt or foul the atmosphere by unwholesome or noxious stenches, or impregnate the water of wells or springs in the vicinity by percolation through the soil, thereby endangering the public health, hence the authorities agree that it is not nor can it be regarded a nuisance per se, or in and of itself And whether the act of depositing a dead body in its place of sepulture is the commission of a nuisance depends entirely upon its proximity to the habitations of the living and the manner in which it is accomplished Moreover, under the doctrine that a city authorized by its charter to declare what shall constitute a nuisance cannot declare that to be a nuisance which is neither such in itself nor under the common law nor made so by statutory enactment, the court holds that the city council of such a city is not authorized to declare generally that to deposit a dead body in any portion of the inhabited district shall constitute a nuisance, when it is conceded that such an interment may be made in the usual way in some sections thereof, without giving offense to the senses of any human inhabitant or endangering in the least measure the health of the community Power "to provide for the health, cleanliness, ornament, peace, and good order of the city," the court pronounces no doubt ample to authorize the city to adopt reasonable measures prescribing rules and regulations, as it respects the place and manner of burials within the limits, but it declares that the city can not arbitrarily prohibit them, unless such prohibition be a reasonable exercise of the power There being within the city limits considerable tracts of land which were sparsely inhabited, so that, for example, interments could be made on some of them so that they would be distant a half mile or more from any human inhabitant or public thoroughfare, it was assuredly not a reasonable regulation, as a police provision, or for the conservation of the health or good order of the community, the court holds, to exclude burials from the whole territory save certain districts enumerated by the ordinance On the other hand, if the legislature had granted special and express power to exclude burials from within the city limits, the adoption of such an ordinance would be a legitimate exercise thereof, and no one could question its validity

Doctrine of Ordering Physical Examinations Reviewed —The Supreme Court of Indiana says, in City of South Bend vs Turner, an action instituted by the latter party, that while the question of ordering the physical examination of the plaintiff in a personal injury case has but recently engaged the attention of the courts of last resort, the fundamental principle is an ancient doctrine of the common law As such it was limited, it is true, to a few classes of cases, among them mayhem and divorce cases wherein impotency was charged But as the sources of evidence have been extended, to parties and in many other ways its application has been expanded to meet new conditions The doctrine rests upon the principle that justice is the object of judicial investigation, and that courts charged with its administration, as a necessary means of attaining that end have inherent power to require the production of the most infallible evidence That its application to personal injury cases is a modern practice does not disprove its common law origin Beginning with a Missouri case, in 1873, there have followed many adjudications upon the power of the trial court to order a physical examination of the plaintiff in suits for personal injuries upon the request of the defendant In this first case the power, upon slight consideration was denied In 1877, in a well considered Iowa case the power was affirmed Following this lead, the states of Alabama, Arkansas Georgia, Kansas, Kentucky, Michigan Missouri, Minnesota, Nebraska, Pennsylvania, Ohio, Texas and Wisconsin have reasserted the rule as announced in the Iowa case The cases wherein they have done it establish the following propositions 1 That trial courts have the power to order the medical examination by experts of the injured parts of a plaintiff who is seeking to recover damages therefor, 2, that a defendant has no absolute right to demand the enforcement of such an order, but the motion therefor is addressed to the sound discretion of the trial court, 3, that the exercise of such discretion is reviewable on appeal, and correctible in cases of abuse, 4 that the examination should be applied for and made before entering upon the trial, and should be conducted under the direction of the court, whenever it fairly appears that the ends of justice require a more certain ascertainment of important facts which can only be disclosed or fully elucidated by such an examination, and such an examination may be made without danger to the plaintiff's life or health or the infliction of serious pain, 5, that the refusal of the motion when the circumstances appearing in the record present a reasonably clear case for examination, under the rules stated is such an abuse of discretion in the trial court as will operate to reverse a judgment for the plaintiff 6 that such order may be enforced, not by punishment as for a contempt, but by delaying or dismissing the proceeding The discretion lodged in the trial court, as fairly deducible from the decisions, is a sound discretion, based solely upon legal considerations When serious and permanent injuries are claimed by the plaintiff, and he or she has submitted to examination by a chosen physician or surgeon who appears as a witness in the plaintiff's behalf, and the nature, extent and effect of the injury are to be deduced from objective conditions, and so fully from no other source, no degree of sentiment will justify a denial of the motion When it becomes a question of

probable violence to the refined and delicate feelings of the plaintiff, on the one hand, and probable injustice to the defendant, on the other, the law will not hesitate, the court, in making such orders, with respect to time, place, and persons in every case, having such due regard for the feelings of the plaintiff and proprieties of the case as the ends of justice will permit So far as the court s researches have revealed, the federal supreme court now stands alone in denial of the power The decisions of New York were confused, and the rule both affirmed and denied in inferior courts until established by legislative enactment in 1893 In Illinois, the supreme court, in 1882, disposed of the question in a single line, as follows, "The court had no power to make or enforce such an order," but, in subsequent decisions, while not expressly overruling that one, has recognized the existence of the power when properly and timely invoked Indiana, also, now falls into line, and upholds the power

Current Medical Literature

Titles marked with an asterisk (*) are noted below

Philadelphia Medical Journal, June 8

1 *What I Have Learned from One Hundred and Sixty one Operations for the Relief of Senile Hypertrophy of the Prostate Gland (To be continued) Orville Horwitz
2 Progress of Medicine in the United States During the Nineteenth Century Charles W Dulles
3 *A New Clinometer for Measuring Torsional Deviations of the Eye Delimiting Paracentral Scotomata and Metamorphosia and Detecting Simulation of Blindness Alexander Duane
4 Membranous Enteritis Erroneously Treated for Phthisis—Presentation of Patient J Preston Miller
5 *The Knee-Jerks in Chorea Augustus A Eshner
6 Heredity as a Factor in Mental Deficiency T Alexander MacNicholl

Medical News (N Y), June 8

7 *The President s Address American Medical Association Charles A L Reed
8 *Internal Medicine in the Nineteenth Century N S Davis Jr
9 *The Value of Clinical Microscopy Bacteriology and Chemistry in Surgical Practice John A Wyeth
10 *The Progress and Tendency of Hygiene and Sanitary Science in the Nineteenth Century George M. Kober

American Medicine (Philadelphia), June 8

11 *The President s Address American Medical Association Charles A L Reed
12 *The Value of Clinical Microscopy, Bacteriology and Chemistry in Surgical Practice John A Wyeth
13 *The Progress and Tendency of Hygiene and Sanitary Science in the Nineteenth Century George M Kober
14 *Internal Medicine in the Nineteenth Century N S Davis Jr

Medical Record (N Y), June 8

15 *The President s Address American Medical Association Charles A L Reed
16 *Internal Medicine in the Nineteenth Century N S Davis Jr
17 *The Value of Clinical Microscopy, Bacteriology and Chemistry in Surgical Practice John A Wyeth
18 *The Progress and Tendency of Hygiene and Sanitary Science in the Nineteenth Century George M Kober

Boston Medical and Surgical Journal, June 6

19 *The Value of Clinical Microscopy Bacteriology and Chemistry in Surgical Practice John A Wyeth
20 *The Surgical Treatment of Gastric Ulcer with Report of Cases F B Lund
21 *Idiopathic Abscess of the Kidney A T Cabot
22 *The Effects of Training Second Paper Eugene A Darling

St Louis Medical Review, June 1

23 *The Use and Abuse of Anesthetics Alfred Roulet
24 Application of Bacteriologic Examinations to Clinical Surgery Hermann B Gessner
25 Acute Active Cerebral Hyperemia with Report of Two Cases A C Brown

June 8

26 *The Value of Clinical Microscopy Bacteriology and Chemistry in Surgical Practice John A Wyeth

New York Medical Journal, June 8

27 *The Address of the President of the American Medical Association Charles A L Reed
28 *Internal Medicine in the Nineteenth Century N S Davis Jr
29 *The Value of Clinical Microscopy Bacteriology and Chemistry in Surgical Practice John A Wyeth
30 *The Progress and Tendency of Hygiene and Sanitary Science in the Nineteenth Century George M Kober

Cincinnati Lancet-Clinic, June 8

31 *Diseases of the Gum Borders and Sockets of the Teeth C M Wright
32 The Oppositions to Sanitary Science Brose S Horne
33 Atmospheric Causes of Disease Davis R Emmons
34 An Outlook H H Spiers
35 Nearly Bloodless Cesarean Section P D Covington
36 Appendicitis Jacob M Hall
37 Nasal Surgery B Merrill Ricketts
38 Membranous Enteritis Mark A Brown
39 Is There an Inherited Tendency to Appendicitis? Wm H DeWitt

Virginia Medical Semi-Monthly (Richmond), May 10

40 Insects as Disseminators of Disease Ch Wardell Stiles
41 Scarlet Fever in the District of Columbia J E Walsh
42 Report of Cases 1 Eczema Squamosum 2 Ambulatory Typhoid Fever 3 Lacerated Cervix Uteri, Cervical Endometritis Prolapsed and Subinvoluted Uterus—Operation under Cocain Hypodermically—Remarks on Bright s Disease and Oxaluria 4 Hemorrhoids Removed with Angiotribe 5 Recurrent Appendicitis Treated without Knife Bittle C Keister

May 24

43 Empyema of the Frontal and Ethmoidal Sinuses Complicated with Orbital Abscess D Kerfoot Schute
44 Devirgination N E Aronstam
45 Medical Aspects of Cancer of the Breast William Osler
46 Problem Involved in the Treatment of Eclampsia, with Illustrative Cases J Whitridge Williams
47 Sweet Chalybeate Springs Va T M Baird

Medical Age (Detroit, Mich), May 25

48 *The Legal and Medical Aspect of Food Adulteration H W Wiley
49 Importance of Clinical Teaching—Pulmonary Tuberculosis Louis F Bishop

Pennsylvania Medical Journal (Pittsburg), May

50 Medicine Past and Present H D Hockenberry
51 The Electro magnet in Eye-Surgery, with Presentation of One, with Demonstrations and Report of a Number of Cases Edward B Heckel
52 Typhoid Fever and Its Treatment by the Woodbridge Method John M Bertolet
53 Leukemia Adelaide M Underwood
54 Chloroform and Ether—Their Administration W A Marsh
55 A Series of One Hundred Appendicitis Operations Performed During the Last Thirty one Months Evan O Niell Kane
56 The Closing of the Century R H Milnor
57 New Remedies and New Uses of Old Remedies T C Rich

Medicine (Chicago), June

58 *Some Points of Practical Importance in the Symptoms and Treatment of Acute Pneumonia Robert H Babcock
59 *A Description of the Appearances in Five Cases of Diaphragmatic Hernia C A Parker
60 *Neurasthenia Sanger Brown
61 *The Diagnosis and Variations of Epilepsy as Ordinarily Recognized Harold N Moyer
62 Prostitution Its Suppression or Control F R Sturgis

Maryland Medical Journal (Baltimore), June

63 A Notice of the Life and Writings of Valescus De Tarenta Frederick P Henry
64 An Unusually Large Polypus Presenting in the Pharynx. A V Milholland

Canada Lancet (Toronto), May

65 Filariae and Filariasis J H Elliot
66 Dysmenorrhea D Gilbert Gordon
67 A Case of Multiple Neuritis Succeeding Typhoid Fever with Permanent Paralysis R Parsons and Chas P Lush
68 The Prevention of Tuberculosis J E Elliott
69 A Case of Ainhum H B Anderson

Albany Medical Annals, June

70 *Relation of the Sympathetic Nervous System to Functional Amblyopia Harry S Pearse

Medical Sentinel (Portland, Ore), May

71 Some Points on the Diagnosis of the More Common Forms of Nasal Obstruction and Their Radical Relief E DeWitt Connell
72 Gunshot Wound of the Lung Operation Recovery H H Hanson

Toledo Medical and Surgical Reporter, June

73 The Relation of the Medical Profession to Education Wm D Stewart
74 The Best Means of Using Opportunities Campbell Coyne
75 Cathartics Harrison Hathaway
76 Rupture of the Eye ball Charles Lukens

Annals of Surgery (Philadelphia), June

77 *A Loop Around the Hyoid Bone as an Aid in Narcosis During Certain Operations on the Lower Jaw and in the Mouth, and in After Treatment Christian Fenger
78 *Excision of the Intact Gasserian Ganglion Willard Bartlett
79 *The Pathology of Trigeminal Neuralgia, Illustrated by the Microscopic Examination of Two Gasserian Ganglia Sidney I Schwab
80 Osteoplastic Amputation of the Arm With the Description of a Useful Saw for Osteoplastic Amputations Willy Meyer
81 Cases of Laceration of the Spleen and of the Kidney Followed by Recovery After the Removal of the Injured Organ Samuel J Mixter
82 *The Operative Treatment of Cirrhosis of the Liver Charles H Frazier
83 Angina Ludovici George G Ross
84 Complications in Fractures Involving the Hip joint John E Owens
85 Fracture of the Pelvis Thomas M Paul
86 A New Knot tightener Hugo Ehrenfest
87 The Value of the X ray in Surgery J Rudis Jicinsky

Therapeutic Gazette (Detroit), May 15

88 Hemorrhagic Malarial Fever—Its Treatment W E Sparkman
89 The Treatment of Malarial Hematuria T H Watkins
90 The Treatment of Malarial Hemoglobinuria James M Parrott
91 A Case Illustrating Extraordinary Idiosyncrasy to Quinin H A Hare
92 General Considerations of Treatment of Placenta Previa Charles P Noble
93 Gastric Ulcer Its Etiology Symptomatology, and Diagnosis, with Special Reference to Treatment (Concluded) D D Stewart

Ophthalmic Record (Chicago), May

94 Rupture of the Sphincter of the Iris and V Shaped Rupture of the Choroid on the Nasal Side from Contusion of the Eyeball G E de Schweinitz
95 *Pterygium Operation, Method by Subconjunctival Antero Inferior Fixation John O McReynolds
96 *The Closed Artificial Eye J L Borsch
97 Successful Removal of Steel from Vitreous Clark W Hawley

Oklahoma Medical Journal (Guthrie), May

98 Chorea D W Griffin
99 Early Diagnosis and Treatment of Cancer of the Cervix Dr Thompson
100 Katatonia—Its Symptoms and Characteristics John W Duke

Canadian Journal of Medicine and Surgery (Toronto), June

101 Vaccination P H Bryce
102 Diphtheria of the Conjunctiva James MacCallum

Louisville Monthly Journal of Medicine and Surgery, June

103 The Importance of Studying the Condition of the Heart Muscle in Disease Hobart Amory Hare
104 Tuberculosis of Bone J Garland Sherrill
105 Chronic Empyema of the Maxillary Sinus Operation and Treatment J A Stucky
106 The Operative Clinic in Abdominal Surgery and Gynecology at the Kentucky University Medical Department Louis Frank

St Paul Medical Journal, June

107 *The Role of the Infections in Diseases of Women Charles A L Reed
108 A Surgical Clinic Carcinoma of the Pylorus Salivary Calculus Right Oblique Inguinal Hernia Mastoiditis Following Primary Tubercular Otitis Media N Senn
109 Cancer of the Common Bile Duct Report of a Case of Carcinoma of the Duodenal End of the Common Duct with Successful Excision William J Mayo
110 *Some Further Notes on the Extension of the Principle of Bisection in Abdominal Surgery Howard A Kelly
111 *A Few Observations upon the Microscopical Pathology of Appendicitis D H Lando
112 Etiology and Treatment of Pyorrhea Alveolaris—Stomatitis Ulcerosa Chronica F Forchheimer
113 *A Clinical Study of the Surgery of the Kidney Archibald MacLaren
114 Cases of Epididymitis Treated with Unguentum Crede Geo M Coon

Medical Dial (Minneapolis), June 1

115 Rest in Health and Disease C K Bartlett
116 Treatment of Acute Diarrheal Affections A J Black

Journal of Medicine and Science (Portland, Me), May

117 The Live Animal in Its Relation to Medicine and Pharmacy Frank E Taft
118 The Metric System—Its Advantages and Disadvantages O W Jones
119 *Discussion of Dr Foster s Nine Questions on Syphilis G Frank Lydston

Colorado Medical Journal (Denver), April

120 Chronic Gonorrhea Donald Kennedy
121 Papillomata of the Soft Palate, Turning into Sarcomata Melville Black
122 Neglect of a Great Opportunity for the Advancement of Medicine and Surgery in Denver Henry Sewall

Southern California Practitioner (Los Angeles), May

123 Battle Royal Between Science and Superstition—An Historical Study Fred Baker
124 Nervous Diseases of Children Elizabeth F Kearney

Medical and Surgical Monitor (Indianapolis), May 15

125 Ephraim McDowell Wm Lane Lowder
126 *Some Points in Operating for Mastoiditis George F Keiper
127 Cerebrospinal Meningitis—Report of Case A T Stewart
128 Drug Helps in Diagnosis John T Scott
129 The Old Preparations N E Aronstam

Medical Mirror (St Louis), May

130 Scope and Usefulness of the Physician in the Educational World James Lee
131 Notes from the Other Side Henry Patch
132 A Front rank Man of Medicine—A Sturdy Surgeon—A Lovable Man—Professor Chas A L Reed—A Sketch I N Love

American Medical Compend (Toledo), June

133 Obstipation, Blood, Pus and Mucus in the Rectum Thomas Charles Martin
134 Treatment of Tubercular Joints B Becker
135 Tincture of Iodin in Morning Sickness of Pregnancy P H Strausz
136 An Efficient Local Treatment for Inflammation and Allied Conditions D E Bowman
137 Complicated Fractures Their Diagnosis and Treatment Thomas H Manley
138 The Relation of the Medical Profession to Education W D Stewart

Laryngoscope (St Louis), May

139 *A New Technique for the Reduction of Turbinal Hypertrophies M A Goldstein
140 *The Effects of Epidemic Influenza on the Mucous Membranes of the Upper Respiratory Tract D Braden Kyle
141 Abscess of the Sphenoidal Sinus Occurring with Acute Mastoiditis Oscar Dodd
142 Sensory Neurosis of the Nose H L Myers
143 Cornu Cutaneum Auris John C Lester
144 Therapeutics of Iodoform Emulsion Victor Urbantschitsch
145 Accidents Attending Adenoid Operations Christian R Holmes and H Stowe Garlick
146 Foreign Body (Tooth) in Larynx of a Man 51 Years Old Gottlieb Kiaer
147 Tubercular Laryngitis in Child of Three Years Gottlieb Kiaer
148 A Few Cases of Suppurative Middle Ear Disease, the Complications and Operations Albert B McKee
149 Animate Bodies in the Auditory Canal J M Ingersoll
150 Syphilis of the Nose and Throat Edward D Capps

Richmond Journal of Practice, May

151 The Treatment of Tuberculosis Geo E Barksdale

Kansas City Medical Index-Lancet, June

152 *The Tender Point in Pressure—Paralysis of Peripheral Nerves Wm Browning
153 Auto inocular Cystitis Samuel C James
154 The Place of Sentiment in a Professional Life John R Brown
155 Locomotor Ataxia in Its Modern Aspect John Punton
156 Report of a Case of Phlegmon of the Orbit W H Schulz

New Orleans Medical and Surgical Journal, June

157 Strychnin—Its Clinical Uses J M Barrier
158 The Annual Report of 1901, with an Historical Summary of Educational Progress, to the President of the Tulane University of Louisiana, at the Annual Commencement of the Medical Department, May 1, 1901 Stanford L Chaille
159 Ptomain Poisoning, Duration of Cases in Children L G LeBeuf
160 Dandruff—Its Treatment J N Roussel
161 Scarlatina and Diphtheria—A Case with Bacteriologic Examination—Remarks on Antitoxin E M Dupaquier

Carolina Medical Journal (Charlotte, N C), May

162 *Albuminuria without Manifest Organic Renal Lesions W A Deas
163 Extrauterine Pregnancy, with Report of a Case of Simultaneous Pregnancy in Both Tubes C R Robins

Columbus Medical Journal, May

164 The Professional Man and Twentieth Century Citizenship William O Thompson
165 Pelvic Injuries R Harvey Reed
166 The Treatment of Influenza Otitis John Edwin Brown
167 Wounds of the Eye—Their Sequelæ C S Means

Southern Practitioner (Nashville, Tenn), June

168 *The X Fever of the South from a Biologic Standpoint Hayden A West

Peoria Medical Journal, May

169 The Treatment of Acute Appendicitis C U Collins
170 Introductory Discussion of Rectal Dilatation in the Practice of Medicine A B Middleton
171 What of Electricity? O B Will

AMERICAN

1 **Prostatic Hypertrophy**—The different methods of treatment of prostatic hypertrophy are noticed by Horwitz in detail The operations performed are classified and number 11, including vasectomy, castration and the combinations of suprapubic and perineal prostatectomy and Bottini's operation He thinks that the latter proves in a large majority of cases perfectly satisfactory Local anesthesia may be used The operation is comparatively safe if performed early and the patient is confined to his bed but for a few days It is also applicable to a large number of advanced cases, removing the obstruction, while a double vasectomy will avoid the danger of recurrent attacks of orchitis dependent upon frequent catheterization As regards vasectomy as a curative measure he offers the following conclusions 1 As a curative measure vasectomy is of little value, and is not to be recommended 2 The operation appears to be most effective when performed on patients between 50 and 60 years of age in whom the prostatic enlargement is of the soft glandular variety The genital organs of patients of this age are usually in a healthy condition and the individuals usually object to any operation that is liable to interfere with their sexual functions 3 The operation is serviceable in those cases where the physical condition of the individual renders him unfit to undergo surgical procedure, who will not submit to a more serious proceeding, who has to depend upon the frequent use of the catheter, or who suffers from periodical attacks of orchitis 4 Sexual vigor is not diminished by the division of the vasa deferentia 5 Atrophy of the testicle does not result from the operation Suprapubic cystotomy is indicated when retention exists and the usual methods of evacuation are impracticable, also as a palliative means in the "break down period attending catheter life," where resisting powers have disappeared and secondary involvement of the bladder and kidneys has occurred More serious operations are precluded by the patient's condition, but immediate relief is demanded by the obstructing prostatic gland It is also indicated in feeble old persons, where there is a fibrous growth, rendering catheterization difficult and the passage of the Bottini bougie impossible Where there is long standing chronic cystitis and probably diseased kidneys, which preclude prostatectomy, suprapubic cystotomy may be selected as the least dangerous and most satisfactory operation

3 **New Clinometer**—Duane describes at length a new clinometer for measuring torsional deviations of the eye, delimiting paracentral scotomata and detecting simulation of blindness, together with the method of its employment in these various conditions

5 **Chorea**—Eshner notices Gordon's recent article, editorially noticed in THE JOURNAL p 1258, and confirms the latter's statement to a certain extent. The phenomena are not elicited in every case When present they seem to represent an intensification or reinforcement, or in some instances to act as an excitant of the choreic movement.

7—See THE JOURNAL of June 8 p 1599
8—Ibid, p 1606
9—Ibid p 1611
10—Ibid p 1617
11—Ibid p 1599
12—Ibid p 1611
13—Ibid p 1617
14—Ibid, p 1606
15—Ibid, p 1599
16—Ibid, p 1606
17—Ibid, p 1611
18—Ibid, p 1617
19—Ibid, p 1611

20 **Gastric Ulcer**—The following is the summary given by Lund of the indications for the surgical treatment of gastric ulcer, and the conclusions of his paper He reports a case of perforative ulcer and chronic intractable ulcer and discusses the literature and treatment 1 That in perforation immediate operation is absolutely indicated 2 That in cases in which the symptoms fail to yield after medical treatment for a reasonable period operation, consisting either of excision of the ulcer or gastro enterostomy, should be performed, and this before the patient has become so exhausted as to render surgical intervention dangerous 3 In hemorrhage, where slight frequently repeated bleeding promises to produce grave anemia or exhaustion, similar early operation should be done 4 Where a patient has suffered more than one copious hemorrhage, operation should be performed and the extent and nature of the procedure should be decided upon according to the power of the patient to withstand operative manipulations, and the conditions found during the progress of the operation Only active ulcer and its complications are considered in this paper, and the after effects such as pyloric contractions adhesions, etc, are purposely left unconsidered

21 **Kidney Abscess**—Abscesses of the kidney, according to Cabot, may be due to injury, to extension or inflammation of contiguous parts and to an inflammation extending through the pelvis The parasites producing the disease are streptococcus and staphylococcus, the colon bacillus pneumococcus and typhoid bacilli All these undoubtedly circulate in the blood and are eliminated in the kidneys the latter especially in large quantities The greater number of cases of this character occurs in the course of general infection the toxins in the blood depress the circulation, enfeeble nutrition favor fine clogging of the vessels and infection of local tissues When the heart is involved the kidneys are still more easily infected A case is reported in which the disease was due to invasion by the colon bacillus, though the recovery of the patient prevented the discovery of the primary lesion As regards the diagnosis of pelvic abscess, he says in the presence of chills, high and variable temperature and delirium, together with local renal symptoms swollen and sensitive kidney, the diagnosis is not difficult especially with confirmatory evidence by urinary examination as is possible in most cases The only conditions that may be confounded are acute exacerbation of inflammation in a tubercular kidney, acutely inflamed calculous kidney, and highly congested and hydronephrotic kidney due to mobility In either of the first two conditions there is usually a history of long standing trouble though this can not be always relied on In every case of doubt he thinks it advisable to explore the kidney by incision If abscess is not found, incision of the capsule will render the intense congestion of the kidney less severe If there is any question of calculus opportunity for a thorough search is afforded and for removal, and if the kidney is movable and suffering from congestion or intermittent hydronephrosis from twisting of the vessels and ureters it can be fixed Operation therefore, is advisable in every case

22 **Effects of Training**—Darling has continued the investigation of the effects of training instigated by the Harvard Athletic Committee during the season of 1899 and 1900 and has obtained the assistance of Prof Atwater and Dr Benedict of Middletown in studying the dietary They found the effects of foot ball similar to those of rowing but deviations from the normal were not so great, the exertions being more intermittent and intervals of rest occupying a large portion of the time of play Both sports appear to accustom the heart, kidneys and other organs to the extraordinary demands, so as the season progresses they do their work more easily An investigation of rowing was made and is of some interest on account of an accident occurring at the time to one of the members of the crew requiring a substitute in his place, and the effects of increased exertion and practice on the crew and on the substitute are given In the case of the substitute the sudden re

sponsibility and work affected him more seriously than the others and he was much prostrated with the symptoms of collapse due to overexertion when not in perfect condition The after effects of training are also studied upon the rowing squad of 1899, and the author says no ill effects which may be reasonably attributed to training are to be discovered nine months after stopping

23 **Anesthetics**—Roulet describes the technique of the precautions to be employed in the use of anesthetics He is rather an advocate of chloroform considering that its dangers have been exaggerated, while those of ether have been correspondingly minimized, but he insists on the necessity of the perfectly pure article in either case As regards subarachnoid cocainization he considers it much more dangerous than chloroform its dangers being partially due to the treacherous nature of cocain, the dangers of sepsis and of hemorrhage into the cord from the divided blood vessels He gives a tabulated statement of some 900 cases, calling attention particularly to some of the embarrassments of the method

26—See THE JOURNAL of June 8, p 1161

27—Ibid, p 1599

28—Ibid, 1606

29—Ibid, 1611

30—Ibid, 1617

31 **Riggs' Disease**—The conditions producing Riggs' disease are noticed at length and the anatomical conditions Wright holds that it has a relation with morbid conditions in almost every portion of the body and its cause is often a neurosis, but any kind of disordered condition may have to do with its production Its effects also are multiple and he says he can not point out even the partial and obvious diseases, which may result from neglected pyorrhea alveolaris, but the interdependence of the health of the organs upon one another is too well known to let us permit the whole organism to become undermined by this progressive chronic, and curable disease He maintains that the treatment of this disease should be raised to the same plane as the treatment of diseases of the eye, ear, nose and throat and it be considered no longer as a purely dental condition If this can not be done, we had better fall back on the old method and recommend extraction and plates

48 **Food Adulteration**—Wiley first notices the action of arsenic in the recent beer poisoning epidemic in England The ostensible purpose of all the pure food laws is restrictive, and he classifies them as follows 1 General laws, which do not mention any food by name, but consist of general principles 2 The discriminating laws, including those which specify certain articles of food He objects to this as a rule, as not being favorable to fair trade, and believes that the general laws, of which he gives an example, would meet the proper indications best 3 The prohibitive laws, and of these there are two kinds Those which prohibit the manufacture and sale of food products which are wholesome and nutritious, and laws which prohibit the manufacture and sale of added deleterious substances Examples of the first kind are found in a few states and relate mostly to the manufacture and sale of oleomargarin Their injustice needs no comment The second class, aside from the fact that they are discriminating, are advisable, providing the deleterious effect of the contained substance is beyond question The fact is that there have been very few attempts to determine impartially the character of many of the prohibited articles The fourth class of legislation is what he calls fiscal because it lays a tax on food products for the purpose of raising revenue, and is also discriminating Having thus classified the legislation he passes to the question of adulterants which may be divided into two categories 1 Innocuous adulterants, including those which are neutral or even nutritious, and 2 noxious or directly or indirectly injurious to health According to the circumstances many kinds of adulterants may be in one class and another at different times and from the point of view of medical jurisprudence the classification is not important The principal processes of food adulteration may be classified as follows 1 Adulteration secured by the elimination of some valuable constituent The most common form is the abstracting of cream from milk 2 The addition of some harmful diluent Dairy products furnish another example of this practice, illustrated in the joke of the well and the milk pail 3 Adulteration by the substitution of a cheaper for a dearer product, as in the case of cotton seed oil for olive oil, oleomargarin for butter 4 Adulteration by coloring an inferior product to resemble a superior, which is a very common practice 5 Food adulteration by the addition of antiseptics, which is the most common of all and found in all perishable articles of food He mentions the substitution of infant foods for milk, and calls attention to the importance of age as regards the effects of these substitutes Adults can stand impurities, which may injure infants and he lays down the rule that any form of adulteration which by any final action upon a healthy organism or by any immediate action on a weakened organism produces harmful effects should be prohibited On the other hand, those adulterants which are indicated on the label and work no deception may be permitted provided they do not, under the above circumstances, produce any injurious effects Of the adulterants that are not injurious to health he mentions glucose which if properly prepared is thoroughly wholesome, but if it is manufactured with sulphuric acid containing a trace of arsenic, as in the English poisoning cases, it may be very dangerous Another harmless adulteration is oleomargarin and many vegetable oils of this class, such as cotton seed oil, sunflower oil, and olive oil, this is reprehensible, but not on hygienic grounds As regards the coloring materials he mentions particularly coal tar products, which in minimum quantities probably are harmless, but there is a presumption of guilt on those who employ them These colorings are absolutely indigestible and by far the most dangerous, however, of the deleterious substances are those added to prevent decay In all, 67 different samples of antiseptics which are advertised in the market have lately been examined in the Department of Agriculture Of these 33 contained borax or boric acid, 8 sulphites of sodium potassium or calcium, 5 contained salicylic acid or its sodium salts 4 benzoic acid or its sodium salts, 1 was a mixture of boric and salicylic acid, 1 boric acid and ammonium fluorid 3 formaldehyde, 2 pyroligneous acid 1 ammonium fluorid, 1 beta naphthol One half of these consist of borax or boric acid, which is the least objectionable of the common preservatives Indeed, while he goes so far as to say that he does not so much object to boric acid food products, if it is plainly described on the label, the most objectionable of the antiseptics is salicylic acid, the use of which even in small quantities should be condemned There are many others not on the list of those examined, they include notably saccharin and nitrate of potassium Of these saccharin is objectionable while nitrate of potash may be permitted in condimental doses Formaldehyde even in minute doses may be injurious to infants and weakened adults The use of fluorin should be prohibited, at least until it is demonstrated harmless These preservatives are sold under trade names which give no clear idea of their composition and the sale of injurious substances under fanciful names is a crime which should be adequately punished

58 **Pneumonia**—The points brought out in this paper by Babcock are 1 That a pneumococcus pneumonia is not necessarily a lobar pneumonia 2 That the gravity of the symptoms in many cases does not depend upon or bear any relation to the extent of the pneumonic process but is the result of the infection He reports a case which illustrates both of these points The pneumonia was limited to scattered and small exudates and the patient suffered from paralysis of the vasomotors with consequent capillary paresis and cardiac asthenia Death occurred in less than three days from the invasion the temperature being subnormal in the axilla This last he accounts for by capillary dilatation causing rapid radiation and cooling of the skin, thus making a deceptive reading of the thermometer The practical point is the effect of invasion on these nerve centers He thinks it is advisable in such cases to give diffusible stimulants, frequently administered Aside from the pure heart stimulants in these cases, he knows of

nothing so efficient as full hypodermic doses of strychnia as a cardiac tonic in 1/30 or 1/20 of a grain every two hours and even hourly in very urgent cases He recommends also the administration both by rectum and subcutaneously of physiologic salt solution to aid in the elimination of toxins, in cases of cyanosis blood letting is undoubtedly of service at times and will promote the action of the salt infusion Finally the inhalation of oxygen is also to be recommended and it should be given freely and if need be continuously

59 **Diaphragmatic Hernia**—Five cases of this condition are described by Parker, who concludes that diaphragmatic hernia is of fairly frequent occurrence, the diagnosis being rarely made—in no more than 2 per cent of the cases The absence of the sac is the rule, it being present in about 10 per cent of all cases, and only 1 per cent of traumatic ones Although the so called weakened places predispose to hernia in some traumatic cases in shot and stab wounds no such causal relation exists Stab wounds are usually on the left side, being the side naturally opposed to the stroke from the opponent's right hand The contents are most frequently omental, but may include almost any contents of the abdomen Complicating intercostal hernia is not infrequent Although many of the acquired lesions of the diaphragm are incompatible with life, yet gross defects in its structure may occur with little or no disturbance of health The diagnosis is aided by the presence of local scars or lesions Skiagraphy may also be of value The immediate danger is due to the injury of the adjacent viscera, the remote danger is from contraction of the opening and constriction and is greatest in small wounds Spontaneous cure may result from contraction of the orifice and atrophy of the contents-composed of unimportant structures Treatment is necessarily surgical and limited, on account of the infrequency of the diagnosis severity of gross lesions, and the inaccessibility of the parts In all wounds in the range of the diaphragm the possibility of injury to that muscle should be remembered and all wounds and its structures be closed at once to prevent hernia

60 **Neurasthenia**—Brown coins a new word "neuren ergen," which he defines as an ultimate form of organic matter contained in the neuron, through whose agency it is convertible into waste products and the various manifestations of nervous energy According to this conception there is in health a current of neureneigen constantly flowing into the neurons and being transformed by them It is at its minimum in repose and its maximum during activity and while there may be wide differences there must be an available neureneigenetic reserve which may be drawn upon as occasion demands The exciting cause of neurasthenia then may be looked for in those influences which demand an exhaustive expenditure of nervous energy and the lack of balance from demands of this kind He reviews the symptoms, causes, etc and points out the distinctive types, the motor as shown in the 'stale' athlete, the sensory and the mental neurasthenic the symptoms as regards the special senses and the vegetative functions The rest treatment he thinks is adapted to neurasthenia in females, and he gives its advantages and disadvantages The neurasthenic man should shorten his hours, he should take out door exercise and diversion, with suitable food, absence of anxiety is necessary This forms an ideal treatment for many cases though it is often carried on for too short a time He says that the physician who thoroughly studies his patient, estimates his capacity and limitations, and by patient persuasion induces him to adhere to a mode of life consistent with the fullest measure of success, comfort and happiness possible to him, earns and sometimes enjoys the grateful appreciation of his patient, but never receives compensation at all commensurate with the value of his services He concludes that the changes observed in the body of the neuron after administration of arsenic suggest its employment in neurasthenia

61—See abstract in THE JOURNAL of May 11, p 1340

70 **Amblyopia**—Pearse argues for the action of the sympathetic in producing amblyopic conditions especially hysteric ones, holding that the effect on the circulation of the fundus is mechanical in hysteric blindness He says our knowledge of the manifold manifestations of hysteria does not permit us to say positively that the retinal elements or the conducting channels of the visual centers themselves are free from the influence of this disease The effect on the visual apparatus of fright, shock, emotion, mental exhaustion, overexertion, etc, is essentially the same as in hysteria, and whether the sympathetic is involved in these results is as yet a question In view, however, of the known action of the sympathetic, and many cases observed, which present the same conditions in the vessels of the fundus that are produced by the sympathetic elsewhere in the body, he asks if the sympathetic does not influence the fundus what does Until a more plausible source of influence is positively demonstrated, we can not do better than accept this explanation, which is far removed from being a theory

77 **Loop Around the Hyoid Bone**—Having lost a patient after extirpation of one half of the inferior maxilla which can only be attributed to asphyxia from sinking back of the tongue, Fenger has since passed a loop of silk or wire around the body of the hyoid during narcosis so that the bone can be pulled forward if necessary and the larynx freed It is easy to pass the loop of silk through a small longitudinal incision over the middle of the body of the hyoid, around its posterior surface up over the upper border and out through the wound A small pad of iodoform gauze is placed in the wound and the loop tied over it, the ends being left long enough to permit of manipulation by the operator on the anesthetizer At the close of the operation the loop is left in place and attached to a plaster of Paris cast, loosely covering the dressing at the field of operation, with traction on the hyoid sufficient to prevent sinking back of the larynx and epiglottis and thus keeping the entrance to the larynx open even during sleep Fenger usually leaves it three or four days until the patient is able to breathe without difficulty with the head and body in any position He shows by illustrations the *rationale* and efficiency of this procedure

78 **Gasserian Operation**—Bartlett reports two cases of excision of the intact Gasserian ganglion, following Cushing's inferior temporal procedure in preference to the Hartley Krause operation, which former he thinks is less tedious and somewhat superior, as the middle meningeal is not endangered and primary ligation of the external carotid made needless Both his patients had violent paroxysms shortly before passing under the anesthesia, but since the operation neither has known one twinge of the neuralgia

79 **Trigeminal Neuralgia**—Schwab gives the findings in two extirpated Gasserian ganglions as illustrating the pathology of trigeminal neuralgia In both the nerve cells were pathologically altered but in neither to such a degree as to consider them primarily affected From these two ganglions it is evident that trigeminal neuralgia is not a definite disease but merely a symptom of various processes affecting the fifth nerve anywhere in its course It is probable that no disease of the nerve cells *per se* exists as a parenchymatous affection With our present knowledge we are justified in making two classes of trigeminal neuralgic affections The first and most common is the neuritis beginning in the terminal division and tending to ascend The second is the interstitial inflammation chronic and progressive, of the ganglion body itself Of the two specimens studied he places one in each category A third division is possibly a central neuritis or neuralgia affecting the sensory root on its way to the pons The operation for removal of the ganglion has a definite standing for wherever the process is located it must be the final means of relief The question is When is it justifiable? In regard to the so called central neurites he fails to see their bearing on the utility of the operation The sensory root, if diseased, he says can only degenerate to the terminal ends of the neurons involved and there the process must stop The pathologic processes in the brain itself, other than those due to pressure and those affecting the meninges, cause no symptoms of pain and as the Gasserian ganglions contain the cells of nutrition of the sensory root, their removal is equivalent to placing this portion of the nerve outside the realm of active

symptomatology What we need is such an improvement of the operative technique as to render the operation comparatively safe and such an improvement in our clinical knowledge that it will be possible to tell what portion of the trigeminus is affected, so that peripheral or ganglion operation can be chosen

82 **Cirrhosis of the Liver**—Frazier reports a case in which Morrison's operation was performed, describes the method, and believes that, though our experience is limited, this operation has a future in properly selected cases, namely, those where the liver is cirrhotic, those where there is reason to believe that liver cells are not devoid of function, those where internal medication and paracentesis fail to afford relief, and lastly those in which there is no reasonable contraindication

95 **Pterygium Operation**—The method of transplantation has been far more satisfactory to McReynolds than any method of simple abscission, and after a very thorough trial of the various methods he has adopted the following plan 1 Grasp completely the neck of the pterygium with a strong, narrow fixation forceps 2 Pass a Graefe knife through the constriction and as close to the globe as possible, and then with the cutting edge turned toward the cornea shave off every particle of the growth from the cornea 3 While the pterygium is still held divide the conjunctiva and subconjunctival tissue along its lower margin with a pair of slender straight scissors, commencing at its neck and extending toward the canthus, a distance of one fourth to one half of an inch 4 Still holding the pterygium with the forceps, separate the body of the growth from the sclera with any small non cutting instrument 5 Now separate well from the sclera the conjunctiva lying below the oblique incision made with the scissors 6 Take black silk thread armed at each end with small curved needles and carry both of these needles through the apex of the pterygium from without inwards and separated from each other by a sufficient amount of growth to secure a firm hold 7 Then carry these needles downward beneath the loosened conjunctiva lying below the oblique incision made by the scissors The needles, after passing in parallel directions beneath the loosened lower segment of the conjunctiva until they reach the region of the lower fornix, should then emerge from beneath the conjunctiva at a distance of about one eighth to one fourth of an inch from each other 8 With the forceps lift up the loosened lower segment of conjunctiva and gently exert traction upon the free ends of the threads, and the pterygium will glide beneath the loosened lower segment of the conjunctiva, the threads may then be tied, and the surplus portions of thread cut off, leaving enough to facilitate removal after proper union It is important that no incision should be made along the upper border of the pterygium, because it would gap and leave a denuded space when downward traction is made upon the pterygium The elasticity of the conjunctiva is such that when this downward traction is exerted on the head of the pterygium it becomes thinned and smoothly applied to the sclera corresponding to the former site of the body of the growth and the margin of the conjunctiva coincides accurately with the sclero corneal junction Thus, when the operation is completed and the speculum removed, the stitches are hidden by the lower lid and the only denuded area is on the cornea The former site of the body of the pterygium is covered by thin and comparatively non vascular conjunctiva What blood vessels remain are directed downward and hence do not tend to encroach again upon the cornea, while the vascular activity is concentrated beneath the lower lid, where it is not only removed from view, but protected, and atrophy surely and naturally follows The corneal wounds heal quickly and the thin conjunctival tissue becomes closely adherent to the sclera After a few days the single stitch can be removed and the old pterygium be found firmly adherent to the sclera and hidden beneath the loosened lower segment of the conjunctiva If the head of the pterygium is very large it may be cut off before the growth is drawn down The general direction of the traction thread is vertical, but it is usually best to incline them in such a way that they will emerge from that part of the conjunctiva that lies below the cornea This is often necessary so as to permit the denuded sclera to be completely covered by smooth conjunctiva and if the conjunctiva should slightly overlap the cornea at any point it can easily be trimmed away without interfering with the desired results

96 **Artificial Eyes**—Borsch describes his experience with artificial eyes and recommends closed hollow ones, which he finds have many advantages, being less irritating, and without sharp edges to cut the tissues

107 **Infections in Diseases of Women**—The following are the conclusions of Reed's article "1 The epithelial surface of the genital tract, in its integrity, is an efficient barrier against invasion of the underlying structures by pathogenic micro organisms that establish parasitic and saprophytic relations to the vagina 2 The normal cervix and its contained secretions are adequate barriers against the invasion of the uterus by pathogenic bacteria that are capable of maintaining a habitat in the vagina 3 The vagina possesses certain powers of self disinfection which work only against the organisms that are at once true parasites and facultative aerobes 4 Certain pathogenic bacteria, notably the gonococcus of Neisser, the Klebs Loeffler bacillus and the oidium albicans, find in the warmth and moisture of the genital epithelium conditions favorable to their propagation and to the increase of their virulence whereby the epithelium itself may be destroyed, to the extent of losing its protective properties 5 Pathogenic bacteria innocuously present in the genital tract may become virulent when introduced into the underlying structure through a breach in the protective epithelium 6 Pathogenic bacteria when introduced into previously normal tissues immediately provoke the process called inflammation, the essential phenomena of which is the speedy deposit and rapid extravascular migration of the leucocytes, which act as phagocytes in preventing the further invasion of the system 7 Pathogenic bacteria that are thus overcome by the leucocytes may enter either by the lymphatic or the sanguiniferous circulation, producing secondary phenomena, septicemia, pyemia, and even the death of the patient"

110 **Bisection in Abdominal Surgery**—Kelly's article is elaborately illustrated and methods described The summary of the latter is given as follows "1 Vertical section of anterior and posterior walls into cervix or into vaginal vault in pelvic inflammatory diseases and in carcinoma of the cervix 2 Vertical section in cases of fibroid tumors wedged in the pelvis, or held down by bilateral pelvic inflammatory disease, also in cases of large fibroid tumors filling the lower abdomen 3 Section of the anterior wall of the uterus followed by division of the posterior wall where the fundus is adherent 4 Transverse division of the cervix followed by vertical section of the uterus from below upwards in cases of dense adhesions of the fundus and the posterior surface 5 Bisection of intraligmentary myomata, bisection of intraligamentary cysts, bisection of adherent ovarian cysts"

111 **Appendicitis**—The microscopic appearances in cases of appendicitis are described by Lando They show proliferation in the crypts producing elongated ducts, almost resembling an adenoma, also infiltration between them and of the submucosa and outside a greatly hypertrophied muscle layer, limited to the inner circular layer He asks the question why the appendix becomes gangrenous or perforated without undergoing distention, while the Fallopian tubes, which are in structure quite similar, are capable of enormous distention and finds the explanation in the well developed circular muscular coat in the latter as compared with its poverty in the former This, however, is only one factor, those of shock virulence, intoxication, etc, have a bearing on the pathologic condition produced

113 **Kidney Surgery**—After reporting a number of cases of various operations on morbid kidney conditions, MacLaren concludes that 1 That surgery of the kidney is in its infancy, and that there is a great field for conservative work 2 That nephrorrhaphy is of questionable utility 3 That cystoscopy with the Kelly tubes, in women, and with the Preston instrument in men combined with catherization of the ureters and the Harris separator, together with the modern Roentgen

photography are valuable aids to diagnosis in obscure kidney diseases 4 That exploration of the kidney, loosening it from fatty capsule bringing it to the surface and bisecting it if necessary, with the exploration of the ureters through the pelvis, is often a justifiable procedure and ought to be more commonly adopted 5 That stone in the kidney is not so rare a disease as we have generally believed, that if left to itself it sooner or later causes death, or disorganization of the kidney and invalidism 6 That pyelitis, cysts, tumors or local tuberculosis can be cured by exploration and drainage or by resection of the kidney 7 That tuberculosis or septic disorganization of one kidney demands nephrectomy, which is not a dangerous operation, provided the other kidney is competent.

119 **Syphilis**—Lydston discusses the answers in regard to syphilis which appeared in a former number of this journal He does not believe that as many as 10 per cent of the population in this country are affected with syphilis in one form or another, though that may be the correct figure in large cities He makes his estimate from impressions derived from various sources, his practice and that of his confrères, the incidental confessions of others, etc As regards the diagnosis of syphilis he is conservative where he formerly was positive in these matters In respect to treatment he thinks that nitrate of silver only aggravates the lesion, excepting in cases of granular sores which requires stimulation One answer given in regard to the curability of syphilis he thinks is too positive, that is that it naturally tends to a cure Nature's efforts to cure syphilis are not productive of very satisfactory results The disease will run its course without treatment, but what a course! The marriage of syphilitics is a very important question, for which it is impossible to lay down rules Lydston criticizes the opinion of Dr J M Mathews that syphilitics should never marry He also criticizes him in regard to the opinion as to the transmission to children and doubts whether he has given the subject the study that is its due

126 **Mastoiditis**—The technique of the operation for mastoiditis is described by Keiper, who discards gown and aprons which render the physician over warm He thinks it is best to take off all outer clothing, including the white shirt and put on a sterilized negligé shirt, and over these a sterilized linen suit with canvas slippers and a sterile cap He emphasizes making a free incision as close to the auricle as possible to expose at once all the surface to be operated upon and be able to give the periosteum the attention it should receive The trephine he thinks a splendid instrument to begin with Some have boasted that they pay no attention to the possible injuries of the facial nerve, he thinks they have been lucky rather than wise Sterilized sponging will do away with the necessity of irrigation, which has its disadvantages, and he believes in making the inspection of the brain cavity and lateral sinus under strict asepsis to be sure of their non involvement

139 **Turbinal Hypertrophies**—Goldstein objects to turbinotomy or turbinectomy on account of the extensive destruction of the physiologic vital tissues, the discomfort and pain to the patient, the frequency of post operative hemorrhage and the possibility of infection He has devised a special trocar for the cautery operation in this condition as suggested by Pierce The trocar is armed with an obturator and sliding ring which may be fixed so as to gauge the penetration After cocainization and sterilization he locks the obturator in the trocar and adjusts it to any desired depth by the ring, and introduces it into the hypertrophied tissue parallel with the turbinal bone and along its surface as close as possible Then withdrawing the obturator he uses the probe with a bead of chromic acid fused on its end, also with guard to secure proper penetration, and passes it through the trocar into the tissues, gradually withdrawing them both so that the entire turbinal area to be cauterized is brought in contact with the chromic acid and there is an even distribution along the whole route He concludes the technique with an oily camphomenthol spray and introduces a cotton tampon saturated with benzoinol into the nares with the hope of producing mild and constant pressure on the hypertrophied mass during healing and cicatrization There is no hemorrhage, the time is short, the patient suffers little or no pain, there are no untoward after effects, no destruction of physiologically vital tissue, and no formation of synechia, as all inflammatory exudate is submucous

140 **Influenzal Effects on the Upper Respiratory Tract.**—Kyle describes briefly the various conditions following influenza in the upper respiratory tract The virus has a peculiar faculty of getting into all sorts of localities He has seen both middle ears involved, and both mastoids in a short time, and the frontal sinus becomes involved early in the disease and reaches its greatest degree of disturbance during the height of the disease The ethmoidal cells are involved early or during the attack, and the disease frequently continues as a suppurative ethmoiditis distinguished by its virulent infectious character Tonsillar and peritonsillar involvement is quite common The mucous membranes are affected in various ways blood clots form on the surface, yet there may be no distinct hemorrhage There is often a thickening of the membrane afterwards, not an edematous swelling, but a tough and infiltrated condition A curious fact is that local treatment with nitrate of silver, iodin, chlorid of zinc, etc, aggravates and makes worse the inflamed area, while sedative oily solutions seem to relieve Where there is need to use a germicide, he prefers the Loeffler solution He believes that there is a marked alteration in the local constituents of the blood, the exudate from vessels in this disorder is a highly coagulable albuminous material infiltrating the tissues, obstructing secretion and causing interference in function as well as nutrition

152 **Tender Point in Pressure Paralysis**—Browning states that in a former article he called attention to this tender point, but the feature was not perhaps sufficiently emphasized to gain recognition He has since verified his observation and can more thoroughly estimate its value The tender spot can be demonstrated in most cases during a considerable period in the course of nerve injuries, and it consists of a circumscribed point to be made out where the harmful pressure has been exerted If the path of the musculo spiral nerve around the back of the upper arm, early in a pressure case of the common radial type, be closely palpated, a very definite tender spot can generally be discovered It is not excessively sensitive, but can be detected by running up and down over the course of the nerve with the finger tips, pressing firmly Sometimes the patient can find it best The time in which it develops is uncertain, in some cases it appears early, and it may not be found even after a long period of time in others The practical and theoretical importance is considerable It indicates that there are pathologic changes at the point of injury and leaves the presumption that there is a limited congestion or effusion at the affected spot and probably slight alteration in nerve structure, sufficient to interrupt conduction, without as a rule causing any degeneration It is useful also in the diagnosis in determining the character of the case Any slight inflammation in or about the nerve with a sort of focal neuritis, if left undisturbed tends to prolong the paralysis and is an indication for local treatment By applying counter irritants or local derivation directly over the tender spot we attack the cause of the trouble and materially hasten the cure Of course this local treatment should be supplemented by other measures

162 **Albuminuria**—Dean finds from his statistics that there is a functional albuminuria occurring with more or less frequency and persistency The cases have been traced to various causes such as dietetic neurotic and oxaluric conditions Under whatever form they occur there is reason to believe that vascular changes in the kidneys exist, that there is a true local congestion which may lead to more serious trouble if persistent There is no reason, he thinks, for believing in a true physiologic albuminuria

168 **"X" Fever of the South**—This disorder, which has been previously noticed is described by West It seems to

bear close resemblance to typhoid in some respects It is ushered in by not more than three days of fever, the temperature rising suddenly and remaining between 103 and 104 F for from two to eight weeks The bowels are generally constipated, though in three cases there was diarrhea and tympanites The nervous symptoms are conspicuously absent The object of his study was to determine the presence or absence of three things 1 The hematozoon of malaria 2 The bacillus of typhoid 3 The presence or absence of any other infectious organism A bedside study of wet blood films was usually made each day, in two cases this was made only three times a week The Widal serum test was employed and attempts were made at isolation from the feces and urine Culture experiments were also made The results obtained were 1 The hematozoon of malaria was never found in any of its forms 2 The Widal reaction was not positive at any period during the course of the fever 3 Typhoid bacilli were never isolated from stools or urine 4 No growth resulted from inoculations made from the patient's blood In conclusion, he says that the etiologic factor concerned in typhoid and malarial fever is not present in this fever, and it remains for more refined technique and further research to bring out the cause of X fever In the discussion which followed some of the speakers seemed to think that this disorder was associated with malarial fever though not malaria itself, and hence maintained that it is a disease *sui generis*

FOREIGN

British Medical Journal, June 1

The Pathogenesis of Tabes and Allied Conditions in the Cord CHALMERS WATSON—The author criticizes the more generally accepted view in regard to the pathogenesis of tabes, viz, that it is a disease primarily of the nerve cells He holds that tabes is not a nervous disease in the sense usually apprehended and the lesions in and around the vessels are of primary importance, the lesions of the neurons being determined by the local interference with the blood supply (This does not include the conditions of varying vitality of the neurons as an important factor in disease) Further there is he thinks, grounds for the belief that the condition is dependent upon chronic intoxication, the vascular lesion being to some extent general, but tending to be more advanced locally, and that the more advanced local changes demonstrate the failure of nutrition in the adjacent nerve elements If these views are correct the disease ought to be curable in its early stages He deprecates the tendency to differentiate tabes sharply from other diseases of the cord We should rather investigate the nature of different toxins and the conditions which have brought about the variation in the result of their action The arguments in favor of his views are drawn from the facts of comparative pathology, from histologic appearances of the cord in early tabes, from the fact that we have no occurrence of the disease where the vascular origin can be definitely excluded, and from what he considers clinical evidences in its favor He believes that the vascular theory would explain the anomalous cases, the relation of the onset of the disease to traumatism, exposure, etc, and would account for the transient paralyses and the association of paresis, muscular atrophy, etc, which point to involvement of portions of the cord having no direct continuity with the part most affected The epileptic attacks that occur in the disease, and the mental symptoms also, are, in his opinion, supporters of this view As regards the syphilitic origin of tabes he considers it a mere *non sequitur* from the fact that syphilitic history can be traced in a large number of tabetic subjects He can only say he believes that syphilis alters the physiologic condition in such a way as to favor the attack and the operation of the actual causes of tabes and allied conditions

The Lancet, June 1

Acroparesthesia, Erythromelalgia, Sclerodactylia, and other Angioneurotic Disturbances THOMAS D SAVILL—After reporting a number of cases of acroparesthesias and allied conditions, Savill discusses their causation, classification, and the relation they bear to Raynaud's disease As regards the etiology of acroparesthesia, out of 35 cases recently observed 29, or 82 8 per cent, were females Excluding 2 children, the average age was 32 4 years In 10 patients these conditions were secondary to other maladies, such as neurasthenia, hysteria, Graves's disease, acromegaly and general paralysis, but the rest applied for relief of the acroparesthetic conditions directly "Acroparesthesia, erythromelalgia and the other many and varied vasomotor symptoms have certain features in common 1 They are much more frequently met with in the female sex, the proportion, I find, usually being much higher than that above mentioned I imagine that something like 90 per cent of these cases occur in female patients 2 Vasomotor conditions appear to be due to some inherent and very often inherited tendency in the patient, for they recur again and again in one form or another during the life of an individual Thus, a patient may have migraine at one time severe flushings at another, and syncopal attacks at another, though I have generally found that there is a tendency to a recurrence of the same disorder There are, moreover, two epochs of life which are specially prone to their development—namely, puberty and the climacteric 3 The onset of the symptoms, whatever they may be, is always more or less sudden 4 They are in all cases paroxysmal—i e, they occur in the form of attacks There is a sudden rise, when the symptoms soon reach their acme, followed by a gradual descent In severe cases the attacks may be so frequent as to resemble a continuous malady, but close observation will detect that there are well marked exacerbations 5 In the great majority of the patients flushes or flush storms occur from time to time during the patient's life, should these be absent there are generally other evidences of vasomotor instability 6 A great many of them—particularly of the vasodilator kind—are amenable to treatment by bromids, which relieve them at any rate for a time These six features are very instructive, and many of them may be explained by the study of the physiology of involuntary muscular fiber" He makes the following clinical classification Cases due to vasodilation are, 1, early stage (chronic) attacks of redness tingling, burning, etc, 2, late stage symptoms attended by swelling which gradually becomes permanent (erythromelalgia), 3, if the process takes an acute course the symptoms go to gangrene, usually moist gangrene (Raynaud's disease—congestive or asphyxial type) Cases due to vasoconstriction are, 1 early stage (chronic), ischemia, attended by numbness, tingling "pins and needles," "dead fingers" etc (ischemic acroparesthesia), 2, late stage, sclerosis of skin and subcutaneous tissue, 3, if process takes an acute course dry gangrene probably results (Raynaud's disease—syncopal type) It will be seen that these varieties correspond to the different varieties and phases of Raynaud's disease which begins in one or other of the above ways and may go on to gangrene These cases are also probably related to the condition described by Dr Henri Meige and others under the name of "chronic hereditary atrophedema He remarks that the attacks of perspiration sometimes met with in the extremities, probably come under the same category, but are not included in the above classification, because although the derangement is probably situated in the sympathetic nerves and the sweating is generally attended by flushing, we are not sure that it is not controlled by separate nerves The idea of his paper is to show the relation as it appears to him, of these conditions to each other and to Raynaud's disease We know comparatively little of the sympathetic nervous system Laboratory experiments have not thrown much light on the subject therefore, he believes the first step is to get a clear notion of clinical phenomena and their relation to each other

Arterial Hypertonus and Arteriosclerosis Their Relations and Significance WILLIAM RUSSELL—The author calls attention to the application of the term "arteriosclerosis" and criticizes the signification given to it of recent date through German influence He reports a number of personal observations and sums up the views of other authorities, showing that the term is applied to three diseases 1, to atheroma, 2, to a generalized endarteritis and 3 to a thickening of the intima compensatory to dilatation of vessels from weakening of their middle coat The results which he arrives at through

his own studies are 1 Atheroma and arteriosclerosis are two totally distinct clinical and pathological entities 2 Atheroma is a localized and patchy affection of the arteries characterized by degenerative changes which have long been recognized 3 Arteriosclerosis is a generalized affection of the arteries and is characterized by (a) thickening of the tunica media, this thickening being primarily a true hypertrophy, although it may ultimately show some degeneration, (b) thickening of the tunica intima from fibrous hyperplasia of the subendothelial connective tissue without atheromatous degeneration, and (c) in some instances fibrous thickening of the tunica adventitia 4 The changes in the arteries in the kidneys differ from those in the radial, or even in the renal arteries themselves before they enter the kidneys They differ in the following respects in the kidney the thickening of the intima is proportionally greater the media is not appreciably thickened it may even be atrophied and may have undergone hyaline degeneration (The atrophic changes in the kidneys are in proportion to the sclerotic changes in the vessels) 5 The lumen of the radial arteries and of the arteries in the kidneys is markedly diminished 6 The changes in the nutrient arteries of the brain, and probably of the cord correspond with those in the arteries inside the kidneys 7 Arteriosclerosis may be associated with more or less atheroma in the same subject His cases contradict Thoma's view that thickening of the intima is compensatory to weakening and yielding of the media Much of the confusion has arisen he thinks from failure to separate the points of similarity and dissimilarity in the changes that take place in the arteries inside and outside the kidney Inside the kidney changes are most marked in the intima outside in the media In both the intima is thickened Inside the kidney the media may disappear and often atrophies outside this never occurs He analyzes also certain features of the pulse and contraction of the vessel wall which is not usually recognized excepting in a few distinct morbid conditions such as angina pectoris and some renal troubles He therefore uses the term hypertonus as indicating the condition which he believes exists A number of cases are reported and illustrated by sphygmographic tracings, illustrating this fact The condition occurs at all ages In strong persons it is associated with and a part of heightened blood pressure and high tension pulse In aged people with failing heart it does not lead to increase in the blood pressure but the reverse and is not infrequently the precursor of heart failure In all ages it is produced in the great majority of cases by poisons introduced from without or by auto intoxication It may even be caused by syphilis and probably occurs in all diseases where there is absorption of toxins Hypertonus is connected, in his opinion with arteriosclerosis, in that the recurring or continuing hypertonus leads to hypertrophy of the muscle media of the arteries under the physiologic law of hypertrophy from increased action The thickened intima in the arteries is explained by the circulation in the blood of deleterious substances of various kinds acting on the subendothelial connective tissue

The Bacteriology of Sporadic Cerebrospinal Meningitis WILLIAM HUNTER and ALEXANDER W NUTHALL —In this paper are described the bacteriologic findings in a number of cases of meningitis In all the cases the diplococci had been isolated from the cerebrospinal fluid In nine the fluid was obtained by lumbar puncture during life This diplococcus has the same morphologic and biologic characteristics as Weichselbaum's diplococcus intracellularis meningitidis In some it occurred in the pure culture in others it was associated with other microbes, such as influenzal and tuberculous bacilli The clinical picture and pathologic changes in these cases are those met with in so called "posterior basal meningitis" which in all probability is simply a sporadic manifestation of cerebrospinal meningitis and produced by the same micro organism The cases reported number ten and their bacteriologic findings in culture experiments are given in detail

Bulletin de la Soc des Hop de Paris, May 23

The Pupil Reflex in Syphilis G BABINSKI and CHARPENTIER.—These writers announced two years ago that the absence of the pupil reflex to light, if permanent and unaccompanied by any changes in the eyeball or optic nerve, or paralysis of the third pair is almost pathognomonic of hereditary or acquired syphilis Further experience has convinced them that the absence of the pupil reflex under these circumstances may be the only sign of an organic affection of the nervous system, and that patients thus affected are liable to be attacked by tabes, general paralysis or confirmed cerebrospinal syphilis This sign therefore, may be of great importance as it enables specific treatment to be instituted in the incipient stage

Gazette Med de Paris, May 25

Contraction of the Pylorus in Gastric Pathology M BAUDOUIN —Commenting on the case reported by LÉPINE (See THE JOURNAL of June 8, p 1668), in which the pylorus by its contraction had served as a protecting sphincter against the escape of arsenic in the stomach and consequent intoxication, Baudouin states that he has had a somewhat similar experience, quite frequently during the last ten years, during attacks of neurasthenic migraine He notes a sensation of constriction at the point corresponding to the pylorus This continues during the vomiting but vanishes as the vomiting brings a little bile He always rejoices when he sees the bile as it is evidence that his attack of migraine is terminated The bile can not flow into the stomach unless the pylorus is open

Presse Medicale (Paris), May 8

Temporal Periostitis of Otitic Origin H LUC —Four patients have been treated by Luc for a periostitis involving the temporal bone The inflammatory tumefaction was restricted to this bone and the rear upper wall of the auditory canal while the mastoid region proper was not involved at all in the process which may or may not terminate in suppuration He finds that this temporal periostitis, unaccompanied by intra osseous suppuration usually occurs in the course of a mild infection of the tympanum characterized by an exudate which does not always result in the perforation of the membrane and is frequently to be discovered only by auscultation The pain is moderate but the fever may be slight or intense The external manifestations are an edematous tumefaction over the temporal region and, in case of suppuration, a swelling of the upper wall of the auditory canal where the pus collects at the lowest portion of the temporal fossa A long, thin bistoury easily opens the abscess at this point, incising from without inward, the entire accessible length of the upper wall of the canal passing through all the soft parts down to the bone Pressure on the temporal region will evacuate the collected fluids through this incision and a small drain should be introduced and left for two days

May 15

The Flora of the Human Body and the Evils of the Large Intestine E METCHNIKOFF —This lecture delivered at Manchester states that the human body shelters from sixty to seventy different kinds of microbes There are less on the skin than elsewhere, about thirty are found in the mouth where their secretions attract the leucocytes and are thus beneficial, about thirty in the stomach fourteen in the small intestine and forty five in the rest of the intestines The microbes in the gastro intestinal canal do not seem to influence digestion but certain species evidently prevent the development of others The cholera vibrio for instance kills a nursing rabbit while it is completely harmless for the adult rabbit after its intestines are tenanted by microbes Most of the products secreted by the microbes inhabiting the large intestine are poisonous for the human organism and the auto intoxication may assume all forms Even a chronic inflammation of the large arteries has been noticed in calves as the result of intestinal auto intoxication During our entire existence we have to submit to the noxious action of the poisons secreted by our intestinal flora Attempts to sterilize the intestines have proved futile The best means of getting rid of the microbian flora in the intestines would be to follow the example of the birds, and evacuate the contents of the intestines the moment that digestion is finished Recent experiences have shown that persons can survive in good health after the removal of a considerable portion of the alimentary canal—four individuals

are now alive whose stomachs have been removed Ciechomski, of Warsaw has reported the case of a woman of 50 who had carried a spontaneous abdominal fistula for more than three years without interfering with her occupations or child bearing The entire large intestine was found completely atrophied Comparative anatomy shows that the vertebrates with the smallest amount of large intestine are the longest-lived Parrots and ravens live for 60 to 100 years, while the horse, with its exceptionally developed large intestine, lives but 20 Ostriches and cassowaries live only for 23 to 35 years, and these are the only large birds with a large intestine Man is not immunized against his microbian flora and natural selection has failed to liberate him from his large intestine which is an absolutely harmful and dangerous organ, not merely from the poisonous products of its microbian tenants but also because it is the seat of many fatal lesions Most of the poisons which intoxicate which gradually enfeeble us and render us old before our time originate in the large intestine If it is still impossible to attack the evil at its root by having the surgeon remove the large intestine, there is yet a possibility of relief by means of microbicidal and antitoxic serums and by reinforcing the noble elements of our organs The cytotoxins which Metchnikoff and his pupils have produced, which in large doses destroy red corpuscles spermatozoids kidney and liver cells, etc injected in small doses have an opposite effect, stimulating instead of destroying the functions of the elements in question

May 18

Lateral and End to end Suture of Veins G CLERMONT —After the successful suture of the internal jugular vein during the extirpation of a cervical adenitis, Clermont tested various kinds of sutures on rabbits and dogs to determine the best technique He concludes that large veins alone can be sutured to advantage, although he succeeded in suturing a vein 4 mm in diameter on a rabbit On man he would never attempt it on a vein smaller than the external jugular No 00 silk is preferable to catgut or any absorbable material, but linen thread is as good as silk The best method of suture is that which entails the least contraction of the vessel The blood that accumulates in the stitch holes coagulates at once and closes them tight An over and over suture is perhaps best for a lateral closure but for end to end approximation he found the ideal method the "suture rabattue" or *fell suture* The inner edges of the wound are brought together and the needle is passed through the base of fold formed by the two margins and back again in opposite direction The outer margins are then brought together above and sutured with the same thread, the ends tied together finally outside This method is ideal as there is no projection into the lumen of the vein and normal permeability is retained The aseptic suture of a deep lying vein was not followed by thrombosis in any of his experiments Tikhoff reports that microscopic examination of the wound in the vein in dogs, one to thirty three days after suturing, showed that a parietal thrombus formed over the line of suture inside the vessel, while the blood circulated freely over it Small round cells then developed between the severed tissues and the thrombus and the line of suture is thus isolated by this layer of cells and the thrombus from the interior of the vein By the end of fifteen days this isolation of the suture had continued until it seemed to be pushed out into the perivenous cellular tissue by the proliferation within The endothelial cells gradually extended over the thrombus and closed it in completely It serves at first as a temporary protection over the suture and finally becomes an integral part of it until it is absorbed, and the cicatrix at last becomes a narrow band of cicatricial connective tissue Lateral ligature is so frequently followed by secondary hemorrhage that it should be definitely rejected

Orthoform Eruptions W DUBREUILH —Occasionally the use of orthoform causes and erythematous eruption, *local or generalized complicated* with vesicles or pustules in most cases Rarely the eruption has a gangrenous character Asam has described nine cases in which orthoform dressings of wounds or of varicose ulcers caused a gangrenous ulceration the aspect resembling that of an ulcerated lupus after treatment with pyrogallic acid In exceptional cases the gangrene was deep, with thick, fetid, black eschars The gangrene appeared after a few days, accompanied by intense pains, aggravated by renewed applications of the orthoform Dubreuilh reports two cases of gangrene, but the intense pain in these instances could be relieved only by renewed application of the orthoform, which thus kept up a circulus vitiosus In the first observation, the gangrene was diagnosed as a trophoneurotic lesion The patient was a woman of 38 who had suffered from a fetid diarrhea followed by a violent anal pruritus Orthoform was applied to the region of the anus, and it was not long before the pruritus was replaced by violent burning pains and gangrenous ulcerations, horribly painful and relieved solely by repeated applications of orthoform The patient finally recovered His second patient was a woman of 30 with a history of a pustulous eruption in childhood and a recent eruption of white pustules on the hands followed by almost necrotic erosions, extremely painful spontaneously at times, but not tender A salve containing 10 per cent orthoform was applied and a few days later a diffuse and intense dermatitis appeared on the hands and arms An application of dermatol and salol caused such intense pain that orthoform had to be applied again This relieved the pain at once and for several hours The dermatitis gradually passed away, but the gangrenous erosions multiplied and became aggravated, accompanied by intense spontaneous pains The similarity between these erosions and the anal ulcerations in his first case, suggested that the orthoform might be the cause, and the lesions gradually healed after its suspension Morphin was required several times during the first days of the suspension as the pains were unbearable, but in eighteen days all the lesions were cicatrized, and the pains had disappeared

Revue Hebd de Laryngologie (Bordeaux), May 18

Nasal Hydrorrhea J MOLINIÉ —Nasal hydrorrhea is not a morbid entity, but is always a secondary phenomenon In some cases the discharge comes from the brain and in others from a sinus, owing to a growth or accumulation of fluid there in In other cases the nasal mucosa is the source of the discharge Molinié classifies all the varieties of aqueous secretion from the pituitary as 1, spasmodic rhinitis, in which he includes hay fever, 2, hydrorrheic rhinitis, in which a quart of fluid may be discharged during the twenty four hours This variety usually accompanies the arthritic, nervous, malarial or hepatic predisposition It is aperiodical and the only circumstances which seem to have an influence on its production are emotions and cold Treatment should be local and addressed also to the underlying predisposition The third variety is the reflex rhinitis, due usually to intranasal irritation or cold as the principal extranasal factor In ectopic rhinohydrorrhea the flow may proceed from the skull either spontaneously or after a traumatism Huguenin has reported four cases of hydrocephalus cured by the spontaneous evacuation of cerebrospinal fluid by the nose This craniohydrorrhea may persist indefinitely One case is on record in which it lasted nine years Recovery is exceptional, 50 per cent of the patients have died usually from tuberculosis or a cerebral complication Traumatism was noted in the antecedents of three cases The average age was between 15 and 30 No solution of continuity was discovered at the autopsy in most cases, and the fluid must have found its way through the perineural sheaths or the holes in the cribriform plate or the lymphatic passages which terminate in the nasal mucosa, but which normally are impermeable The treatment must be addressed solely to the primary cause of the hydrorrhea In sinusohydrorrhea the fluid flows drop by drop until the sinusitis is cured In Berg's case the sphenoidal sinus was the seat of the hydrorrhea and the other symptoms were constant headache, exophthalmia and atrophy of the papilla The fluid is not usually perfectly clear in these cases which are always due to some polycystic degeneration or dropsy The differentiation between hydrorrhea from the skull or from a sinus may require puncture of the sinuses He distinguishes still another group which he calls aberrant rhinohydrorrhea of medicinal origin, and concludes by citing several puzzling cases which do not seem to belong in any of the groups above described One patient had a constant hydrorrhea for two years which ceased during

an attack of typhoid fever Ikert's patient has suffered from constant hydrorrhea for more than two years, rebellious to all treatment and remarkable on account of an elevation of temperature every morning accompanied by chills, sweats and aggravation of a cough The nose blood and urine seem entirely normal

Semaine Medicale (Paris), May 22

League Against Syphilis A FOURNIER—A society has been formed at Paris for "Sanitary and Moral Prophylaxis," composed of physicians business men, officials and others, the aim being an actual campaign against syphilis The progress of science has shown that syphilis is more serious and more dangerous than ever imagined until recently Fournier is convinced that the number of syphilitics is increasing and estimates that the proportion to the male population of Paris is from 13 to 18 per cent There is no other disease whose domain has grown so rapidly by annexations This can be seen by comparison of the text books during the last fifty or even ten years Even as late as ten years ago tardy hereditary syphilis was still unsuspected, and parasyphilis has been added to the black record still more recently By parasyphilis he refers to tabes, general paralysis and buccal leucoplasia with its frequent sequel cancer of the tongue These incurable affections prey by preference on syphilitics, and by their gravity and frequency and their resistence to antisyphilitic treatment have rendered the prognosis of syphilis very different from the general acceptation of twenty years ago The prognosis is at least tenfold more serious than in the days of our fathers Many practitioners now forbid marriage under four to six years of treatment The new society aims to have a large representative membership from all classes and to utilize all measures in the campaign against syphilis and its great procuress, prostitution, education of the public in the dangers of venereal diseases, official regulation medical prophylaxis by public evening dispensaries with private consultations and circulars of instruction and warning, besides measures of a religious and moral order He endorses the value of official regulation of prostitution, imperfect as it is, mentioning that 25 to 48 per cent of the clandestine, that is unregistered prostitutes of Paris are syphilitics, and that 873 in the contagious stage were arrested during 1897 for street solicitation, and sent to the hospitals for treatment The innocent wives and children are protected somewhat by this official regulation, but even at its best fully 48 per cent of the children in private practice are slain by syphilis and nearly 86 per cent in the special hospitals Among the measures which the League is advocating is training girls to some trade, the closing of saloons with private rooms, opening the liberal careers more freely to women, warning young girls of the dangers that threaten them, fixing "paternal responsibility" and legal penalties for damages from venereal contamination In regard to warning young men, he quotes with approval "the fear of syphilis is the beginning of wisdom" The public should be warned of the dangers of extragenital contagion He has three patients who infected their mothers by a filial embrace In one case he found the children's nurse developing a typical chancre on the lip unnoticed by the family

Centralblatt f Chirurgie (Leipsic), May 18

Magnesium for Absorbable Surgical Appliances E PAYR—The advantages of an absorbable material for buttons for entero anastomosis and interposed plates to prevent the development of anchylosis in operations on joints are generally recognized and magnesium is proving all and more than Payr hoped for in his first communications on the superiority of this material for appliances in surgical technique There have been no inconveniences from its use He has found delicate magnesium hollow cylinders extremely useful and satisfactory for the primary or secondary suturing of nerves and vessels Narrow strips of magnesium laced together with catgut are a safe and reliable means of arresting hemorrhage in parenchymatous organs Pegs made of magnesium are also very useful to hold rebellious fractures and in pseudarthrosis Previous communications on magnesium for surgical appliances have been noticed in THE JOURNAL xxxvi 1901 pp 294 1357 etc

June 1

Improved Turpentine Ether Narcosis E BECKER—The familiar properties of the volatile ethereal oils in inhibiting mucous secretion, are utilized by Becker to diminish the secretions during ether narcosis He finds that oleum pini pumilionis is the best adapted for the purpose It closely resembles oil of turpentine but has an agreeable, aromatic odor which masks that of the ether He adds twenty drops—about 1 gm—to 200 gm of ether It dissolves readily and he administers the mixture the same as the ether alone He has been much gratified with this improved method of narcosis in his experience with about 500 patients and considers it a distinct advance

Deutsche Med Wochenschrift (Berlin and Leipsic), May 23

Treatment of the Uric Acid Diathesis DETERMEYER and BUETTNER—Clinical tests on several patients at Salzbrunn i Schl showed that the waters of the alkaline spring, Oberbrunn, had besides the diuretic effect and the general dilution of the corporeal juices a specific action on the urine, conferring upon it the power to dissolve uric acid and the urates in vitro and in vivo The urine at first contains an enormous amount of uric acid after these waters have been used for a time This can be explained only by the assumption that the uric acid throughout the organism, in the tissues or in the deposits of urates, is dissolved out by the action of the waters After this has proceeded for a time, the general production of uric acid is diminished, the excess has been dissolved and eliminated and consequently the amount in the urine becomes and remains very small In taking these or any alkaline waters the amount should not be sufficient to abolish the acid reaction, on account of the danger of precipitating the phosphates, and the formation of phosphatic calculi Close supervision is therefore kept over the urine of patients taking the Oberbrunn waters A comparatively small amount is found most effectual

May 30

Tendon Transplantation for Contraction of the Knee L HUESNER—In three severe cases of recurring contraction of the knee after various affections of the joint, the tendency to contraction was permanently cured by transplanting the tendon of the semitendinosus or gracilis muscles The incision should be very long in order to amply isolate the tendons and muscles involved Then a small median incision upward from the patella enables the flexor tendons inside and outside of the aponeurosis of the quadriceps, to be slit and sutured in place

Cerebral Hemorrhage with Verrucose Endocarditis M SIMMONDS—The post mortem examination of two children showed that the cause of death had been cerebral hemorrhage from a ruptured aneurysm in the course of a verrucose endocarditis The same coccus was derived from the thrombosed vessels that had been isolated from the verrucose endocarditic vegetations a staphylococcus Material containing bacteria had evidently been transported from the heart valve to the smaller cerebral vessels and had there occasioned the destruction of the vessel wall and the formation of an aneurysm The connection between the endocarditis and the cerebral hemorrhage was evident In two cases in young women death had occurred in consequence of the rupture of an aneurysm in the right sylvian artery in one patient The remainder of the vascular system and the kidneys were intact and other conditions were normal except that recent and old verrucose vegetations were discovered on the mitral valve In the other patient no less than four aneurysms were found at the base of the brain, and the hemorrhage had evidently proceeded from a fifth Verrucose lesions recent and old, were found on both the aortic and mitral valves No bacilli could be discovered in either case In three others a cerebral hemorrhage was the cause of death but no aneurysm could be found There was a history of chronic recurring verrucose endocarditis in each case and preceding articular rheumatism in one A mere coincidence between the verrucose affection and the cerebral hemorrhage is of course possible but Simmonds believes that all

the seven cases described indicate that there is a close connection between the bacterial verrucose endocarditis and the consecutive cerebral lesion, in the absence of alcoholic or syphilitic antecedents and with the rest of the vascular system and the kidneys intact

Muenchener Med Wochenschrift, May 14

Mixed Ether and Chloroform Narcosis H BRAUN—For several years Braun has been using an apparatus for the administration of ether and chloroform which allows the combination of the two at will A metal case contains two bottles which project above through the cover the larger holding ether and the other chloroform A shallow flat box fits horizontally over the tops of the bottles It has a stopcock in each side near the center, and rubber tubes emerge above and below The upper tube terminates in a rubber bulb The second tube passes into the anesthesia mask When both stopcocks are open the ether and chloroform pass into the mask together in the proportion of 4 to 1 A leather strap suspends the entire apparatus from the neck of the anesthetizer After the mask is applied, the bulb is compressed at each inspiration of the patient When the limit of tolerance has been reached the chloroform is shut off and the narcosis continued with ether alone Slight pressure on the bulb is sufficient to keep the patient under the influence of merely traces of ether during protracted operations A whiff of chloroform may be added from time to time as required In 250 anesthesias by this method an average of 54 c c of ether and 12 c c of chloroform was used the length of the operation varying from fifteen minutes to three and a half hours average forty seven minutes The patients awoke remarkably easily and normally Vomiting occurred in one fifth of the cases, usually only once on awakening By this method the advantages of both ether and chloroform are secured and their disadvantages avoided The narcosis can be individualized to the case 15 to 20 c c of pure ether will be found sufficient for a child while a hard drinker may require 40 to 50 c c of chloroform with little if any ether

Inguinal Hernia of the Ovary QUADRIEG—Three cases are described, two of which were congenital One infant was operated on at two months The painful tumor in the left inguinal region contained a cystic degenerated ovary which was removed The second infant was about three months old and the ovary was twisted and gangrenous The third patient was a woman of 41 in the fourth month of pregnancy She had noticed a bunch in the right inguinal region for nine years, and had suffered from digestive troubles and constipation since that time but was otherwise well The tumor suddenly commenced to grow larger and became painful There was no vomiting nor fever but the appetite had diminished The operation disclosed an inguinal hernia the sac containing the swollen tube and ovary After enlarging the hernial opening the ovary and tube were replaced in normal position, and the patient made an uneventful and rapid recovery The symptoms in the first two cases were merely vomiting and the painful tumor

Cosmetic Operations on Goiter E MEUSEL—The best cosmetic results are obtained by removing the goiter horizontally A flap of gland tissue is cut and the front and rear surfaces pared to make it flat This flap then fits smooth in place and the skin flap over it In seven years of experience Meusel has never had a hemorrhage nor necrosis from a goiter thus treated The flap of the gland thus left is sufficient to prevent cachexia strumipriva

Myasthenic Paralysis H OPPENHEIM—The first symptoms of bulbar paralysis appear in the ocular muscles, as phenomena of paralysis or fatigue, ptosis and diplopia After a few weeks, or occasionally not till after a few months, the muscles involved in chewing, speaking, swallowing and the facial muscles show signs of exhaustion This weakness may, however, involve at once the muscles of the nape of the neck, the trunk and the extremities or may spare them for a time The affection may run an alternating course and the limbs or articulations may be the first affected Genuine atrophy of the muscles and the corresponding changes in electric excitability never appear even in a prolonged course of the disease, nor are objective disturbances in sensibility or the senses observed The patients frequently complain of pain in the head, back and extremities Oppenheim considers the neuropathic diathesis the most important factor The influence of infections or intoxications is still dubious, and overexertion is probably merely an inciting cause A few observations indicate congenital anomalies in development The affection seems to be due to a pre existing tendency in certain portions of the nervous system which renders these portions sooner or later incapable of functioning, either that they completely and permanently renounce their functions, or are exhausted abnormally early, and require rest after brief activity The protracted course of the affection—ten, fifteen, and even thirty five years—and the remissions and intermissions, render the prognosis less unfavorable than at first supposed, although twenty six out of the fifty eight cases on record have resulted fatally The general manner of life must be regulated to spare the muscles as much as possible, the food taken in such form as to supply the greatest amount of nourishment in the form that requires least work from the muscles of chewing and swallowing These measures can be supplemented by the constant current and by gentle hydriatic measures Faradization is strictly contraindicated

May 21

The Stump of the Appendix Vermiformis—O LANZ—The microscope shows that the muscular and mucous coats of the appendix contract away from the spot when the appendix is crushed close to the base This leaves the serous membrane empty, and the stump therefore consists of nothing but the membrane Lanz advocates crushing the appendix in the manner with the angiotribe, close to the base, concluding with a Lembert suture of the stump as the ideal method of amputating

A Case of Cholecysto Gastrostomy F KRUMM—A patient with a large tumor in the pancreas completely occluding the common bile duct refused surgical intervention until it was too late for more than a palliative operation Adhesions rendered anastomosis of the gall bladder with the intestines impossible and consequently cholecysto gastrostomy was done The fistula thus produced functioned with perfect success Appetite and strength returned and the intolerable pruritus was definitely cured but the cachexia progressed to a fatal termination in seven weeks Boeckel could collect only four cases of this operation in his report at the Paris International Medical Congress The improvement can only be transient, and this was his experience in cholecystenterostomy Quenu has published a case of chronic icterus completely cured by cholecysto gastrostomy and Jiboulay has also reported a similar case No bad after effects from the flow of the bile into the stomach were observed in any case

Inhalation of Sprays M SAENGER—As the result of much experimentation Saenger announces that a fluid sprayed in the throat does not necessarily penetrate into the remoter air passages as a spray The droplets flow together, and the spray effect is thus entirely lost even in the throat The fluid thus formed may find its way downward by gravity by capillary attraction, and by the force of the inspiration, and thus be drawn into the remotest alveoles, but it is extremely improbable that any of the spray passes beyond the bifurcation of the bronchi The narrowing of the mouth into the throat favors the coalescing of the droplets of spray

May 28

Application of Steam to the Uterus H FUCHS—Since the introduction of atmocausis, or the application of a stream of steam directly into the uterus, not a single hysterectomy has been found necessary for the uncontrollable uterine hemorrhages of the menopause at the Kiel clinic The early and remote results in twenty two cases are tabulated and described in this article In several cases the uterus had been previously curetted in vain The steam, at 115 to 120 C, was applied for twenty to forty seconds In six cases the menopause was completely established after the vaporization, in six others menstruation recurred, but diminished in quantity,

and in eight slight discharges of blood were noticed at irregular intervals The condition known as chronic uterine infarct was cured by the removal of the cause The involution of the enlarged organ was hastened All of the patients are in good health with one exception and a repetition of the atmo nu is is in prospect to definitely abolish the slight hemorrhages which still persist in this case

Instrumental Perforation of the Uterus —F SCHENK — In the case reported a woman of 38 x para, was operated on for the cure of a laceration from the last childbirth eight months before The uterus was rinsed out with a sublimate solution The catheter introduced penetrated 20 cm without encountering the least resistance Two other catheters were inserted with the same experience The patient showed signs of distress and the abdomen was opened at once to forestall intoxication from the sublimate as a perforation seemed certain Three were found The uterine walls were so soft and friable that it was almost impossible to suture them the organ seemed normal except for this extreme friability, and the patient rapidly recovered Menstruation had immediately preceded the operation and Schenk noticed a similar friability recently in another patient who had menstruated just previous to the operation

Wiener Klin Wochenschrift, May 9

Local Action of Suprarenal Extract on Nose and Throat L HARMER —The reduction of the hyperemia that follows the local application of suprarenal extract to the mucosa of the nose and throat has a favorable effect in catarrhal conditions It enhances the analgesic action of cocain which property is probably due also to this vasoconstricting influence possibly the cocain works more effectually on tissue free from blood suprarenal extract is therefore indicated in cases that require cocainization as the amount of cocain can be materially reduced This is the only positive indication announced as yet from Chiari s clinic in regard to the action of suprarenal extract on the nose and throat after considerable experience

May 16

Etiology of Articular Rheumatism G SINGER —In five cases of acute articular rheumatism and in one of rheumatic chorea, Singer found the streptococcus in the various organs post mortem The staphylococcus was also discovered in the case of chorea, which had been accompanied by an inflammation of the elbow and preceded by a follicular tonsillitis The writer in 1898 called attention to the numerous clinical and anatomic analogies between acute articular rheumatism and the staphylo strepto mycoses Others are gradually coming to recognize now that there are a number of indistinct and ambiguous cases of disease which belong in the borderland between acute articular rheumatism and cryptogenetic pyemia The experiences of the past in respect to pneumonia and endocarditis demonstrate the folly of setting certain bacteria apart as specific for certain diseases Other micro organisms, not at all related to them, may originate the same apparently specific processes The staphylococcus and the streptococcus have each been found in acute articular rheumatism and the latest research by Wasserman and Meyer only confirms the assumption that there is no specific agent of this disease as the streptococci which they discovered proved to be merely the ordinary variety after all

Clinical Diagnosis of Renal Colic and Kidney Infarcts R SCHMIDT —The clinical pictures in a large number of collected and personal cases of renal colic are reviewed and the most important diagnostic and differentiating points are seen to be the following In every case of renal colic it is necessary to determine whether the pain proceeds from conditions inside the kidney—increased pressure or tissue necrosis—or in the ureter from obstruction Intrarenal pain is generally restricted more to the actual kidney region The organ is extremely sensitive to pressure especially in case of infarction The pain is more continuous, and is eventually accompanied by sudden intense albuminuria or a nephritic sediment in the urine The extrarenal or ureteral colic has a greater tendency to radiate along the course of the ureter which is sensitive to pressure Acute hydronephrosis may follow The pain is more intermittent The intrarenal colics may be caused by twisting of the stem of a wandering kidney, sudden compression from a vascular, malignant tumor, chronic nephritis with acute inflammatory exacerbations or infarcts in the kidney The pain on pressure is generally more intense and more frequent in the latter case but the blood pressure is low The colic pains frequently appear while the patient is in bed, in case of infarcts but with torsion of the stem or chronic nephritis, the colic is usually preceded by a mechanical injury An apoplectic onset of the colic pains in their extreme intensity is a feature peculiar to the colic from infarction but hematuria is rare Suddenly appearing and rapidly disappearing albuminuria, without sediment in the urine, is another characteristic of infarction Enteroptosis obscures the prognosis, as it induces reflex vomiting The pain in cases of infarct is increased by reclining on the healthy or least affected side Total occlusion of the renal artery may occur without heart symptoms Oliguria and anuria are frequent in bilateral renal infarcts, but there is no morbid desire to urinate This article is continued through several numbers, and is a communication from F Neusser s clinic

Gazzetta degli Ospedali (Milan), May 12

Agglutination by Malarial Blood G GRIXONI —Tests on 130 persons have demonstrated that the blood or the serum of a malarial patient will agglutinate the erythrocytes in the blood of a normal person or of a malarial or typhoid fever patient or in any other infectious disease Normal blood does not possess this property In doubtful cases of malaria, therefore, a drop of blood or serum from the febrile patient, mixed with a drop of blood from another person free from malaria, will differentiate the disease to the naked eye in ten minutes When the blood agglutinates in this way even although there may be no clinical manifestations of malaria, quinin treatment should be instituted, as the affection evidently persists in a latent form This agglutinating power is specific of malaria and typhoid fever it was impossible to detect it in any other of the numerous diseases and affections tested Quinin in vitro, as well as in the organism, has a marked anti agglutinating influence

The Cerebrospinal Fluid a Secretion CAVAZZANI —The alkalinity of the cerebrospinal fluid is less than half that of the blood In dogs under the influence of curare that is, with the central nervous organs functioning the alkalinity progressively diminishes, while in other dogs under the influence of morphin, it remains stationary Cavazzani accepts these facts as confirmation of the assumption that the nerve secretes an acid substance during its functional activity He has determined the presence of an oxydasis in the cerebrospinal fluid, for which he proposes the name "cerebrospinosis" He considers the cerebrospinal fluid an actual secretion, probably localized in the epithelial elements

Endovenous Injection of Iodin SPOLVERINI —Remarkably fine results are reported by Spolverini in the treatment of scrofulo tuberculosis in children, and of syphilis in adults, by the direct injection into a vein of a maximum of 5 cg of metallic iodin His formula is potassium iodid 3 gm and metallic iodin 1 gm in 100 gm of sterilized distilled water As much as 28 cg of iodin was injected in one case with no bad effects The tolerance to the usual doses was always perfect except in a few tuberculous children, in whom the local reaction threatened phlebitis for a day or so

May 19

The Cutaneous and Tendon Reflexes in Nervous Diseases E TEDESCHI —The morbid processes entailing injury of the pyramidal tracts are usually accompanied by an exaggeration of the tendon reflexes and the weakening or abolition of the cutaneous reflexes This antagonism between the tendon and cutaneous reflexes is especially marked in certain cases of chorea and in epileptics immediately after a seizure The examination of the cutaneous reflexes is a valuable differentiating measure between organic and functional nervous affections Babinski s sign almost invariably accompanies a lesion of the pyramidal tracts but the condition of the extensor and flexor muscles of the toes is important in its production

Queries and Minor Notes.

OBLIGATIONS OF OPERATOR TO ASSISTANT

GRAND ISLAND, NEB, May 17, 1901

To the Editor —Will you kindly solve the question involved in the following case? Dr A operated on a patient and was assisted by two of his colleagues whom he had engaged for that purpose Dr A continues in attendance until the patient's death some months later The widow receives sufficient life insurance money to pay all bills, but taking advantage of the fact that life insurance is exempt from execution she refuses to pay only such as she may elect She tells Dr A that if he will discount his bill 25 per cent, I think, she will pay him He complies and receives the cash ($300) Dr B, one of the assistants, holds that Dr A was and is, in honor bound to protect the interests of the physicians whom he had called into the case Dr A disclaims any such responsibility The question submitted is Has Dr A any obligations touching the compensation of the physicians who assisted him, he having made all the arrangements as above stated and nothing having been said as to gratuitous assistance, or that each one should look to the patient, or as it has resulted, the widow, for his pay? In other words in such a case as the above, what are the *obligations* on the one hand and the *rights* on the other? J L S

ANS —The obligations and the rights depend on the arrangements made between the parties interested, which our correspondent does not disclose It is not unusual for physicians to assist each other in operative work, without making definite arrangements for compensation, and sometimes perhaps without any intention of asking it If however, compensation was expected, and this was understood by the operator, he is under a moral obligation at least to look out for the interests of those he called to his aid

MEDICAL PRACTICE ACTS

RAVENSBORO, OHIO, June 10, 1901

To the Editor —Do persons graduating in Ohio or other states have to be examined by the State Board of Indiana before they are allowed to practice in that state? D N M

ANS —The laws of the state of Indiana require a diploma from an institution recognized as coming up to the standards fixed by the State Board All others have to pass an examination The State Board also is authorized to arrange as regards reciprocity with other states About a year ago a resolution was passed that No applicant from any other state for a certificate entitling him to practice medicine, surgery and obstetrics, shall be granted a certificate by this board on conditions more lenient than those required of applicants from Indiana by the examining board of the state from which he comes' This would imply that applicants from Ohio would have to stand an examination in Indiana unless reciprocity had been established between the states

CARLISLE, PA, June 11, 1901

To the Editor —I wish to secure a copy of the medical laws of the different states of the United States Will you please tell me how and where I can secure the same? H H L

ANS —If a file of the Bulletin of the American Academy of Medicine is available to you or at hand it would give the best general résumé of the laws of the different states in regard to the practice of medicine The June number, now due will probably bring it up to date The state of New York published a résumé of the practice acts a year or two ago but it would not now be up to date We know of nothing better than the résumé in the Bulletin of the American Academy of Medicine, which can be obtained through correspondence with the Secretary, Dr Charles McIntyre, La Fayette College, Easton, Pa

New Patents

Patents of interest to physicians etc, May 21 and 28

674,691 Apparatus for the production of caustic alkali and halogen gas Charles E Acker Niagara Falls, N Y
674,371 Spraying nozzle Carl Altenburger, Des Moines, Iowa
674 391 Exercising device Frank W Baker, Chicago
674,395 Hygienic handkerchief pocket or receptacle, Anna M Bevis, Mount Ayr, Iowa
674,833 Spray tube for nebulizers Wm and J Boekel, Philadelphia
674,598 Hernial truss John W Bunker Farmington, Maine
674,645 Truss, Henry C Demaree and W C Eckhart, Roca, Neb
674,701 Antiseptic apparatus Wilber M Kelso Chicago
34,546 Design, truss support Benjamin T Allison and J J Brown Pine Bluff, Ark
675,364 Medicine dose indicator James L Burton, New Britain, Conn
674,853 Coin or lozenge package Elliott H Crane, Colon, Mich
675,131 Hernial truss Henry T Emeis, Salt Lake City, Utah
675,208 Truss Henry H Gerhardt, Nashville, Tenn
675,275 Nasal device Josephus H Gunning, New York City
675,042 Apparatus for testing urine John Hepburn, Warren, Pa
675,006 Hernial truss Francis E Jackson, Socorro, N M
675,243 Atomizer, Josiah K Proctor, Philadelphia
675,017 Surgical appliance Wilber C Roush, Anderson, Ind
675,180 Atomizer Jacob Waldman, New York City

The Public Service.

Army Changes

Movements of Army Medical Officers under orders from the Adjutant General's Office, Washington, D C, May 30 to June 5 1901, inclusive

Ira A Allen, captain and asst surgeon, Vols, leave of absence extended

Joseph L Bell, contract surgeon, now in Washington, D C, on leave of absence, is relieved from further duty at Fort Crook, Neb and will proceed to Fort Morgan Ala, for post duty there

George M Decker, contract dental surgeon, from Troy, Pa via Tampa, Fla, to Havana, Cuba, for duty in the Department of Cuba

James C Dougherty contract surgeon, from New York City, N Y, to Albonito, P R, for post duty

H A Eberle, contract surgeon, leave of absence granted on being relieved from duty in Porto Rico

Lawrence A Felder, contract surgeon, from Fort Morgan, Ala., to Atlanta, Ga, for annulment of contract

Nevil M Garrett, contract surgeon, leave of absence granted

F M Hartsock, lieutenant and asst surgeon, U S A, leave of absence granted

George P Heard, contract surgeon, member of an examining board at Fort McPherson, Ga

George H Richardson, contract surgeon, from Washington, D C, to post duty at Plattsburg Barracks, N Y

William M Roberts lieutenant and asst surgeon, U S A, member of a board at San Francisco, Cal for the competitive examination of enlisted men and others for commission in the Army

I Homer Wolven, contract dental surgeon, from Washington D C to San Francisco, Cal, en route for duty in the Division of the Philippines

In addition to the above, the following named medical officers, upon the expiration of their present leaves of absence, are to be assigned by the commanding general, Department of California, to temporary duty pertaining to the muster out of returning volunteers, on the completion of which they will proceed to Manila, P I, as heretofore ordered Major Thomas C Chalmers surgeon Vols Major Luther B Grandy, surgeon, Vols Major John A Metzger, surgeon, Vols Major Frederic A Washburn, Jr, surgeon, Vols Major John Carling, surgeon Vols, Major George P Peed surgeon Vols Captain Frederick H Sparrenberger asst surgeon Vols Captain Charles R Gill, asst surgeon, Vols and Captain Willis J Raynor, asst surgeon, Vols Also the following named assistant surgeons U S A are honorably discharged by the Secretary of War as majors surgeons U S Vols only to take effect June 30 1901 Captains Henry C Fisher, Eugene L Swift John S Kulp Frederick P Reynolds Merritte W Ireland William F Lewis Paul Shillock Alexander N Stark, Powell C Fauntleroy Charles Willcox Henry A Shaw and First Lieutenant George W Mathews

Navy Changes

Changes in the Medical Corps of the Navy, week ended June 8 1901

Drs J W Backus F A Asserson J F Murphy, W Seaman and R R Richardson appointed assistant surgeons in the navy

Surgeon F J B Cordeiro, detached from the *Buffalo*, June 10, and ordered home to wait orders

Surgeon L W Curtis, ordered to the *Buffalo*, June 10

P A Surgeon E S Bogert, Jr, commissioned surgeon from Dec 15 1900

Asst Surgeon R W Plummer, detached from the *Nashville* and ordered to the *Princeton*

Asst Surgeon W Seaman ordered to the *Independence* June 17

Asst Surgeon H H Haas detached from Naval Hospital, New York and ordered to the Norfolk Navy Yard June 10

Asst Surgeon R R Richardson, ordered to Naval Hospital New York June 10

Asst Surgeon J M Brister detached from the *Independence*, June 17 and ordered to the Asiatic Station via transport *Hancock*

Marine Hospital Changes

Official list of the changes of station and duties of commissioned and non commissioned officers of the U S Marine Hospital Service for the seven days ended May 30 1901

Surgeon H R Carter, to inspect the local quarantine station at Baltimore, Md

Surgeon R M Woodward granted two weeks extension of leave of absence from May 28

Surgeon G T Vaughan detailed as delegate to represent the service at the meetings of the Association of Military Surgeons of the United States May 30, and American Medical Association June 4 at St Paul Minn

P A Surgeon J O Cobb relieved from duty at Fort Stanton N M, and directed to proceed to Portland, Ore

P A Surgeon C P Wertenbaker, detailed to represent the service at meetings of the Association of Military Surgeons of the United States May 30, and American Medical Association June 4, at St Paul, Minn

P A Surgeon C P Gardner detailed to represent the service at meeting of the Washington State Medical Society, at Seattle, Wash, June 18 to 20 1901, inclusive

Asst Surgeon C E Decker, granted leave of absence for ten days

Asst Surgeon W C Hobdy to proceed to Thomson Ga, for special temporary duty

A A Surgeon J W Hargis granted leave of absence for four days from May 28

Hospital Steward E T Olsen, granted leave of absence for fifteen days from June 13

Hospital Steward L C Spangler, to proceed to Delaware Breakwater Del, and report to medical officer in command for duty and assignment to quarters

APPOINTMENT

Lewis C Spangler of Ohio appointed junior hospital steward in the U S Marine Hospital Service

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Address

THE RELATION OF NERVOUS AND MENTAL DISEASES TO GENERAL MEDICINE

ADDRESS OF CHAIRMAN, DELIVERED BEFORE THE SECTION OF NERVOUS AND MENTAL DISEASES, AT THE FIFTY SECOND ANNUAL MEETING OF THE A M A, AT ST PAUL, MINN JUNE 4 7 1901

H A TOMLINSON, M D
ST PETER, MINN

I will crave your indulgence, and take the liberty to depart from the regular order, as defined in the By-Laws of the Association, to the extent of omitting the usual summary of progress during the past year in the realm of neurology and psychiatry, as represented in the literature of our special work, and confine myself to the discussion of some of the tendencies of modern methods of investigation, and their interpretation with relation to nervous disease in general I have been particularly impressed by the increasing tendency to discuss the differentiation of the morbid histology of the nervous system, as if that included all there was to the pathology of nervous disease, to consider that general medical knowledge is of little value in the study of its etiology, and of no importance in establishing its therapeutics

This is the age of mechanics, and the same inspiration which has led men from the pursuit of the philosopher's stone, and the invocation of the supernatural, to the patient observation and application of force in all of its forms to the material advancement and convenience of mankind, has affected science in general, and during the past twenty-five years medicine in particular Hence we now approach the study of the human organism with the same methods and by similar means to those used in determining the properties of matter and the combinations of forces as manifested in inanimate nature These methods are all the more alluring because they call for mechanical ingenuity more than mental effort, and the explanations they suggest of the manifestations of disease and their origin seem so rational and complete Besides these methods represent a natural reaction from the superstition and metaphysical speculation which persisted in medicine, and especially in psychiatry, even to the middle of the last century I believe, however, that this reaction is going too far, that the human organism is something more than a mechanism, also that the morbid histological changes developed experimentally in animals, or found after death in human beings, are not necessarily the cause of the disease conditions they apparently create, any more than their presence in one organ of the body is proof that the disease is confined to that part of the organism In other words, there can not be special change without general disease, and in the study and treatment of the special condition the general involvement and its extent is the most important

It has been asserted that in scientific medicine there is no place for the polemic, that hypotheses are dangerous, and that argument, other than that involved in the comparison of experiments, their verification, and the construction of formulæ, is useless I believe this assumption to be wrong, for, out of it has grown the modern tendency to reduce everything in medicine to mechanical terms, to lose sight of the relativity of all of the activities involved in life, and to develop what, for want of a better name, I will call the organ physiologist and pathologist, and as a natural result the medical specialist, who sees in the symptoms complained of by his patient only the manifestations of disease in the organ or system in which he is particularly interested This tendency has become so conspicuously a characteristic of medical thought and method, that recently one of our prominent medical journals, in commenting editorially in approval of the dictum of a great German pathologist concerning the value of brevity in scientific communications, deprecated the publishing of the details of the clinical history or post-mortem findings in any given case, if they were not directly connected with the organ apparently involved, losing sight of the fact that there enters into the conclusions reached concerning any given case not only the personal equation of the observer but also the influence of his special training upon his interpretation of the facts observed, and leaving out of consideration altogether the obvious inference that another observer differently situated might interpret the facts differently if all the data were presented to him Neurology has become a series of demonstrations of the normal and morbid histology of the general nervous system, and the neurologist is endeavoring to apply this same method to the study of psychiatry, while the psychiatrist still discusses insanity in the terminology of metaphysics The significance of this tendency is well expressed in the following quotation from Herbert Spencer [1] "If insistence on them tends to unsettle established systems of belief, self-evident truths are by most people silently passed over, or else there is a tacit refusal to draw from them the most obvious inferences Of self-evident truths so dealt with, the one which most concerns us is that the creature must live before it can act" I would paraphrase this statement thus Those activities upon which the functioning of the nervous system depends are more important than the resulting activities that the nervous system directs Because of methods of study and the still too prevalent metaphysical conception of the relation of the central nervous system to the activities of the rest of the organism the neurologist has ignored the relation of his special work to general medicine, his studies have been confined largely to the motor apparatus of the nervous system, losing sight of the fact that the nervous system while it directs all of the activities of the rest of the organism supplies nothing toward its own nutrition and is not concerned in the elimination of the waste

materials of its own activity Out of the failure to recognize the obvious inference from this fact in physiology has grown the therapeutic nihilism and sterility, referred to by the chairman of the Section in his address at Atlantic City last year

In order to formulate my argument as to what constitutes what I believe to be the true relationship between general medicine and mental and nervous disease I will posit certain data drawn from current sources of knowledge concerning the facts of development and physiology, as to the relation of the nervous system to the rest of the organism

There are two assumptions we may safely make concerning the human organism, based upon what has been demonstrated as to the processes of its functional activity and is known of its cytology 1, that the primary functions are those of vegetation, and that all others are related and in sequence to some form of activity involved in the processes of nutrition, 2, that the nervous system is the last as well as most complex in the order of development Also, the complexity of the nervous system has increased in a direct ratio with the demands upon the general organism, resulting from changes in its environment It may further be assumed from our knowledge of biologic chemistry that the functional cell wherever found has a limited potentiality, also a normal plane of response to the incident forces constituted in its environment This plane of response naturally will vary with the individual, and other things being equal, will depend for its level of development upon the combined capacities of the parents at the time of conception the competence of the mother during pregnancy, and the suitableness of the individual environment up to the period of second dentition *

It follows as a corollary of this statement that if for any reason the potentiality of the functional cell is abnormally limited or on account of untoward or disastrous conditions in the environment of the organism is manifested excessively the limit of capacity in the area or organ will be prematurely reached and a degenerative process begin That this is true the fact of arrested and defective development and instability in the nervous system, as well as the different tendencies toward degenerative processes in the vital organs abundantly prove Further, those degenerative processes which are supposed to be confined to the spinal nervous system, have for their antecedents, conditions which interfere with general nutrition and elimination for a long time before the symptoms of involvement of the structure of the spinal cord become apparent It is unfortunate that the morbid changes in the histology of the nervous system should be obscured by the results of the degenerative process which accompanies chronic disease so that we are unable to say that the changes found are not the result rather than the cause of the disease present during life, since we always find that these changes have for their chief characteristic, destruction of the functional cell and its more or less complete replacement by the structural tissue This want of correspondence between the symptoms manifested and the amount of degenerative change in the nervous system is well shown in the only two acute conditions which give an opportunity to study the changes apparently causing the symptoms, unaccompanied by other changes which are consecutive I refer to Landry's paralysis and acute delirium In both of these disease conditions while there is nothing distinctive in the morbid histology there is abundant evidence of antecedent involvement of the vegetative organs, with more or less complete abeyance of both their nutritional and eliminatory functions Even in those processes where the morbid histological changes are believed to be not only distinctive but characteristic, we have no evidence that the circulation is not first involved This presumes the presence in the blood stream of some toxic substance acting as a persistent irritant, while the presence of this substance in the organism involves failure or incapacity in the vegetative organs, both as regards resistance to the entrance of toxic material and failure in its elimination

It is not conceivable to me that the relations of the spinal nervous system to the rest of the organism should be any different in kind than those of the cerebrum The spinal nervous system represents the simplest and most direct relationship between the different parts of the organism, and we have it in common with those forms of animal life in which the functioning of the nervous system is confined to the direction of those activities which have for their object the acquisition of food and the avoidance of sources of danger which are obvious Indeed, this is largely the limit of functional activity of the spinal nervous system in even the highest developed organism In those forms of animal life having only a spinal nervous system, the vegetative functions remain inherent in the cell or group of cells comprising the organ—witness what we know of the inherent capacity of the heart and the so-called vital secretions of the different vegetative organs—but as the nervous system continues to evolve in response to the growing complexity of the general organism, resulting from changes in environment there is a practically separate system developed for the control of the vegetative functions, and lastly, as the channels for the transmission of nutrient material, which at first carry all of the products of metabolism indifferently, are separated into an afferent and efferent system, there is evolved the ganglionic nervous mechanism for their control All of these systems are in intimate association but the connection between the vegetative organs and circulatory apparatus, though the ganglionic is most close and these with the cerebrum more intimate than with the spinal, which still has for its principal form of activity the transmission of common sensation, the locomotion of the general organism, and only indirectly the motor activity of the mechanism of the vegetative organs

Any man who has worked much among the insane has abundant evidence of how all of those degenerative processes which are supposed to be the result of disease of the spinal cord and bulb can be mimicked during the course of progressive brain degeneration, and we know how promptly symptoms of involvement of the nervous system follow destructive or degenerative disease of the vital organs While the pathologist finds in studying post-mortem the histological changes in the spinal cord which, from the standpoint of morbid anatomy, seem to him to be causative, he has only to examine the evidence furnished by the study of development and the causes which operate to arrest its processes or make them

* While I do not believe that we have any evidence of increase in the functional potentiality of the nerve cell after this period there are undoubtedly marked increases both in number and special forms of activity, before and after puberty and just as different areas in the nervous system become functionally active at different periods in the development of the embryo, so the level of the plane of response in the individual cell, functional group or area, may be raised at the different epochs in the order of development, without any increase in its potentiality, as shown in the limitation of the period of sexual activity as well as by the excessive activity of all metabolic processes during the period of adolescence, and the reduction in the plane of activity of those parts of the organism involved in the processes of nutrition, after the climacteric period, in both sexes

aberrant to realize that it is still at least an open question as to whether the disintegration he finds is not the result of the breaking down of an unstable structure rather than the cause of the symptoms manifested And that this break-down is in its turn dependent upon impaired nutrition and imperfect elimination following disease in the vegetative organs, not primarily specific affection of the nerve cell Even in syringomyelia, if we consider the mode of development of the spinal cord the weight of evidence from the natural history of the disease and the post-mortem findings, is in the direction of the process being one of atrophic degeneration, taking place in a tissue primarily defective and of limited potentiality

Impaired nutrition involves either failure of supply, overuse or imperfect elimination, and these in their turn affection of the blood vessels, or change in the character of the blood stream itself, either through impoverishment or the presence of some constituent which is toxic, and it is the persistence of these blood changes which give rise to the changes in the blood vessels These changes involve in their turn the pre-existence of failure in one or more of the processes of metabolism or incapacity of the eliminatory organs Therefore while the symptoms manifested may have their origin in a destructive or degenerative process in some part of the nervous system the real disease upon the cure of which the ultimate recovery of the patient depends, has its existence in the vegetative organs, either in the ensemble of their functions or as affecting conspicuously some one of them I believe we may safely say that all disease processes begin as intoxications, and this is so even with chronic degenerative processes in the nervous system During ten years of careful observation of the phenomena connected with the development and manifestations of insanity in more than three thousand cases I have never failed to find intoxication either the result of imperfect elimination or failure in the processes of digestion and assimilation Failure in elimination is most common and involves most frequently the kidneys next the bowels then the lungs and skin Failure in the digestive processes is generally in the direction of an abeyance of function and in cases of depression this is sometimes so extreme that the active constituents of the gastric juice are entirely absent for considerable periods

We are all familiar with the influence of emotion and fatigue upon the nervous system, and have seen how tremor spasm, convulsion and even paralysis follow shock, while again they are apparently the result of violent gastro-intestinal disturbance or renal inadequacy It is here that the question arises as to the truth and significance of my thesis We recognize the effect of overstimulation of an organ or part in checking katabolic change, interfering with oxidation and leading to auto-intoxication but the failure in capacity is just as much the result of the suspension of anabolism as it is of the abeyance of katabolism For, obviously, life involves the persistence of anabolism, so that even aberrant functioning involves the persistence of the nutritive processes The over-activity of the cell or part may be so great or its potentiality so limited that suspension of the nutritive process is complete and almost immediate or the exhaustion may be more gradual so that the interference with katabolism results in retention of so much waste material that the cell no longer is reconstituted but disintegrates While I freely admit that these statements of what is involved in the processes of metabolism are trite and even elementary, yet it is equally true that the most obvious inferences to be drawn from them in their application to the study of mental and nervous disease are either ignored, or, if recognized, not appreciated, because we overlook the fact that the morphologic changes found in the cell simply represent the exaggeration of the processes which, kept in balance constitute normal metabolism, and that these changes may proceed to a very considerable extent without involving the permanent death of the cell, provided the limit of its potentiality is not reached This is graphically shown in the morphologic changes which take place in the cortical cells of that part of the brain anterior to the precentral fissure in acute delirium, which are alike, except in degree, both in those cases where death comes early as the result of pulmonary edema, or later from bulbar paralysis, and this difference in degree, other things being equal will be found to depend upon the amount of instability or defect in the individual which limits his potentiality and exaggerates the manifestations of nervous disturbance

I trust I may be pardoned for referring here to some of my own work, but I will venture to do so because I believe I can best illustrate my contention by relating the experience which first called my attention to the importance of appreciating the intimate relation between general somatic disturbance and mental and nervous disease

Some years ago I gave considerable study to the mode of death among the chronic patients in the St Peter Hospital and found that no matter what the apparent somatic disease, all of them presented marked symptoms of uremic poisoning and the condition of the kidneys was confirmed by uranalysis I noted further that death came in one of four ways 1, suddenly from apparent cerebral hemorrhage, 2, apparent collapse with syncope, 3, more slowly with dilatation of the right heart, pulmonary edema vasomotor paresis and death from asphyxia, 4, apparent asthenic bulbar palsy, sometimes rapidly fatal, again accompanied by a mono- or di-plegia a hemi- or para-plegia of varying degree of completeness, death resulting from progressive asthenia The merging of these different modes of death into each other was also noted from time to time, especially among the victims of chronic degenerative disease of the lungs The necropsy failed to reveal any evidence of gross lesion or degenerative change to account for the symptoms and conditions present during life, but certain changes were found which have been described by me elsewhere[2] This experience led to the systematic study of the urine in our chronic cases to determine if possible how far the nervous manifestations of uremia might be anticipated We found that profound changes might be present in the structure of the kidney without the presence of albumin or casts, and in the absence of the ordinary clinical signs of nephritis Also, that in proportion, as the nervous symptoms of uremia were present, were the ordinary somatic manifestations absent Furthermore we found that uremic poisoning fatal in result, might be present as the result of auto-intoxication from imperfect metabolism, acting through the vasomotor apparatus and bringing about the abeyance of the function of the kidney as the result of vasomotor spasm producing ischemia and in the absence of any marked degenerative change in the kidney itself That is the function of the kidney as a filter was not interfered with but the secretion and excretion of the solid constituents of the urine was diminished and the chlorids

often entirely absent, while for obvious reasons, urea would not be diminished in amount In cases of parenchymatous nephritis and the diffuse form where the medullary substance of the kidney is most involved, the diminution of the excretion of urea was the rule and albumin and casts more common

This experience led us to study more carefully similar conditions among the recent cases, and we found to our surprise that practically all cases admitted to the hospital gave evidence of some degree of renal inadequacy In the cases of so-called delirious mania and in delirium associated with other forms of insanity the evidence of imperfect elimination was marked, and furthermore our success in relieving these conditions was always in proportion and in sequence to the re-establishment of the function of the kidneys In those cases which proved fatal and had been accompanied by high temperature with vasomotor paresis before death, the change in the kidneys was found to be parenchymatous, while in those without elevation of temperature but exhibiting progressive asthenia the change in the kidney was interstitial By following the same method in the study of the other vital functions, the intimate association between irritability, exacerbations of excitement, disturbance of the special senses, recrudescence of delusion and impairment of digestion with constipation was determined

Bearing in mind that in a hospital for the insane, on account of the environment of the patient, the conditions which modify and complicate the progress of degenerative processes in general practice are absent, that the life of the individual is ordered, his diet and occupation controlled, and that in the demented vegetation dominates and often comprises the activities of the organism, it will be readily understood why we see so conspicuously manifested the changes in the vegetative organs, and the influence of interference with or abeyance of their functions in the determination and progress of degenerative processes in the nervous system

If then these conditions exist among the insane in hospitals, they must necessarily have existed in the same individuals before they came to the hospital, and there is *a priori* reason to believe that they also exist among the sane and especially among those suffering from degenerative processes in the nervous system Personally my observations as a consultant confirm, in this connection my experience in hospital work, and lead me to believe that in the appreciation of general nervous disease, the prognosis, and especially in our therapeutic efforts, we are more concerned with the functioning of the vegetative organs and the general processes of metabolism than with the morbid anatomy and histology of the nervous structure, or, to express the conclusion tersely, we are more concerned with function than with form, for the morphologic change seldom determines definitely what the nature of the disturbance of nutrition has been even if it does indicate the result

I do not wish to be understood as failing to appreciate the value and significance of modern methods of research nor to oppose my limited understanding of the results attained to the general opinion But I feel justified in suggesting for your consideration the fact that the study of the pathology of nervous and mental disease has not advanced proportionately with the development of methods for the recognition of its morbid histology And I believe that the apparent futility of therapeutic effort in disease of the general nervous system, has resulted from the giving of undue significance to the morphology of the changes found after death in man, or produced experimentally in animals, and too little study and care to the general processes of metabolism as represented in the functioning of the vegetative organs

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Original Articles.

ORAL MANIFESTATIONS AND ALLIED STATES

E S TALBOT, M D, D D S

FELLOW OF THE CHICAGO ACADEMY OF MEDICINE

CHICAGO

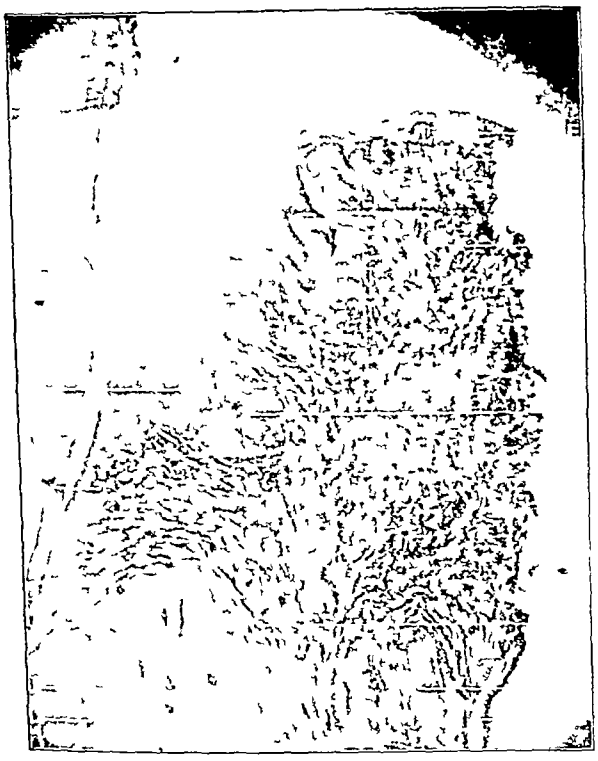
(Concluded from p 1766)

The following autopsy was made on an old man, in whose case the pathologic diagnosis was as follows Senile marasmus (senile emphysema, senile sclerosis of the aorta, atrophy of the parenchymatous organs), scurvy (hemorrhagic gingivitis), chronic aortic and mitral endocarditis, fibrous myocarditis, chronic nephritis, caseo-calcareous areas in the right apex, spleen and left adrenal, double hydrothorax, bronchitis, fibroma of the stomach, amputation of the left lower extremity at the lower third of the thigh The findings unrelated to the scope of the present investigations are omitted The gums were found swollen, and here and there infiltrated with blood There was purulent matter about the roots of the teeth, many of which were loosened and some of which could be removed with the fingers The roots of the loosened teeth were covered with a granular, grayish material

Only the lower frontal teeth and corresponding part of the jaw could be examined The epithelial covering of the gums appeared to be quite intact In some places it was a little thickened, and its lower layers infiltrated with new cells The sub-epithelial tissue was much thickened, presenting the general structure of an inflammatory granulation tissue of some standing Areas occurred in which there were many new cells and but little stroma In other foci the tissue was more fibrous the new cells running in bands Here and there occurred free and intracellular granular, yellow pigment Typical hyaline bodies of various sizes, and staining a precise bluish-violet with Gram's method were found in rather small numbers In some places small sub-epithelial abscesses were met with, which (in the instance of a district including a lower incisor) were really sub periosteal The contents consisted of nuclear detritus and bacteria (mostly cocci) which have accumulated, especially upon and in the walls of the minute cavities extending from such an abscess There seems to be a complete occlusion of the vessels (capillaries) with typical bacteria masses, staining a peculiar bluish-violet color with hematoxylin, and blue with Gram's method, so that the vessels presented the appearance of being very successfully filled by an infection mass The small dilatations, the branches and the larger vessels (judging from structure these seemed to be veins) were sometimes brought out very nicely The intravascular growth of bacteria extended into the bone below as well as, and more especially into, the peridental membrane These abscesses (suppurative periostitis) occur almost exclusively upon the inner surface of the alveolar process, being confined (as far as there was occasion to

observe) to the external aspect of the process There was always a thin, sound layer of bone separating the abscess from the peridental membrane Very generally the spaces in the adjacent bone were filled with a cellular fibrous tissue in which occurred islands of osteoid tissue The bone trabeculæ were generally covered by a thin layer of osteoid tissue, which (from the greater number of cells it contains, as compared with the other bones) must be newly formed Rows of osteoblasts were found often upon the trabeculæ Few Howship's lacunæ were found, and these were filled with small cells There were no osteoblasts in the areas about the abscesses The bone outside of the alveolar process is quite unchanged

The "bacterial thrombosis" not unusually extended into the peridental membrane, which then refused to stain as clearly as normal The upper part of the peri-



X 40 35 M M Zeiss Micro photograph reduced four sevenths
Fig 17 —Longitudinal Section of Tooth Alveolar Process and Gingival Border Showing Active Inflammation in Scurvy in Man — I Dentine C Cementum E Epithelial tissue G Submucous membrane H Periosteum J Alveolar process L Haversian canals M Fibrous tissue V Violent inflammation AA Point of union of epithelial tissue and peridental membrane RR space pocket from want of union of the epithelial fold

dental membrane was usually the seat of cell proliferation and of formation of fibrous due to the direct extension of the similar process in the sub-epithelial connective tissue of the gingivus There were no indications that the process began below, at the apex of the tooth, for example, and extended upward In the peridental membrane, and often connected with the cementum of every tooth examined were very many so-called calco-spherites, calcified concentrically lamellated round or oval bodies, not unlike the "corpora amylacea" In many instances, it seemed as if the body had formed in the cement or at its margin—the cement presenting here a nodular condition

Fig 17 illustrates a section through the tissues of the jaw and cuspid tooth The epithelium is not so dense and thick as in a similar section from the dog Inflammation extends along the capillary layer of the sub-mucous membrane (G) and involves the deeper structures The mucous membrane layer has doubled upon itself, forming a pocket (RR) Violent inflammation is evident at V This is of unusual interest, since it demonstrates that inflammatory products may be carried by the blood-vessels anywhere throughout the alveolar process, and may result in abscesses The inflammation extends throughout the periosteum (H), the fibers of which extend from the root of the tooth over the border of the alveolar process (J) There the coarse fibers of the periosteum contrast decidedly with the finer fibers of the sub-epithelium Absorption and contraction of the alveolar process (fully one-half the length of the root of the tooth) has taken place, as well as lateral absorption The inflammatory process extends through the Haversian canals (L)

Fig 18 illustrates a section of the peridental mem-

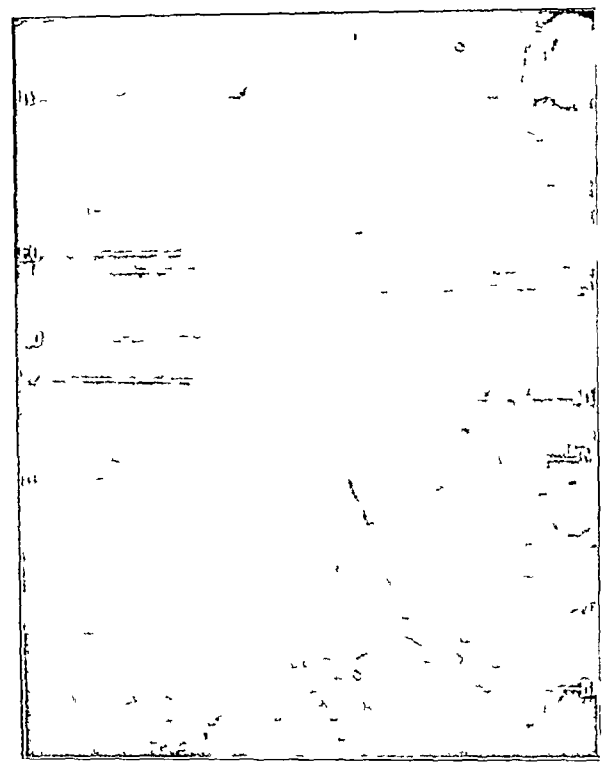


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Fig 18 —Cross section of Inflamed Peridental Membrane Scurvy in Man —I Peridental membrane J Alveolar process K Capillaries L Haversian canals BB Blood vessels of Von Ebner, preceding perforating canals EO Endarteritis obliterans W Epithelial débris

brane (I) and alveolar process (J) with inflammation extending throughout Capillaries (K) are also noticeable in large quantities nearer the alveolar process than the root of the tooth Epithelial debris are evident at W Endarteritis obliterans (EO) may be seen in different portions of the field Inflammation has extended into the Haversian canals (L) but absorption has not occurred to any great extent The blood-vessels of Von Ebner (BB) are quite well shown

Fig 19 is a section showing the cementum (C), the peridental membrane (I) and the alveolar process (J) Marked inflammation extends through the peridental membrane thence through the Haversian canals (which are entirely obliterated) Absorption of the trabeculæ (halisteresis) has resulted to the extent that what remains of the alveolar process (J) are islands of bone held in place by fibrous tissue Blood-vessels of Von Ebner with perforating canals are seen at

Fig 20 illustrates a large abscess (Y) from another location This is also situated within the alveolar wall, showing that the inflammatory products extend through the blood-vessels Marked inflammation is seen upon the side next to the peridental membrane (I^1), while rapid absorption—halisteresis (Q) and perforating canal (P)—is proceeding at the borders of the abscess and nearest the alveolar process

A 48-year-old merchant was dyspeptic, debilitated and asthmatic, and for the treatment of the conditions he had been under calomel and tonics for a little less than two weeks When he came under observation, the mucous membrane and gums were then much inflamed There was marked sialorrhea The teeth were loose The gums were swollen Pus oozed from the gums The breath had a decided metallic odor At my suggestion, his medical attendant stopped the calomel He

X 75 A A obj Zeiss Micro photograph, reduced four sevenths
Fig 19 —Cross section of Tooth Alveolar Process and Peridental Membrane, Showing Active Inflammation and Absorption of Bone Scurvy in Man —C, Cementum I, Peridental membrane J, Alveolar process P, Perforating canal absorption V, Violent inflammation

was then ordered six pints of spring water daily The gums were, on alternate days, saturated with iodin In a few days the soreness and swelling were so reduced that the deposits could be removed The patient was discharged cured in a short time, other than as to the right inferior second molar which was so loose as to require removal This tooth was placed immediately in 50 per cent alcohol for twenty-four hours and then removed to absolute alcohol for twenty-four hours more The membranes had receded about two-thirds the length of the root Sections for microscopic purposes were made from the lower third of the root Of these sections Fig 21 shows a small fragment of inflamed peridental membrane Fig 22 exhibits violent round-cell inflammation, degeneration and liquefaction of tissue

A 35-year-old diabetic painter came under observation for plumbic poisoning His gums were swollen There was decided sialorrhea The teeth were loose Pus flowed from the gums He was placed on ozonate spring water and the gums were saturated with iodin on alternate days Three loose teeth were removed and placed in alcohol Sections from the upper third of the left superior second bicuspid gave results on microscopic examination similar to those already described as occurring in mercurial poisoning Fig 23 shows round cells of inflammation Fig 24 illustrates very marked degeneration of the peridental membrane In the lower right-hand corner are seen the root of the tooth, dentine and cementum The whole surface of the peridental membrane is in an advanced phase of inflammation Just at the border of the root is evident an area of membrane softening Just beyond, but joining, is noticeable breaking down of tissue In the center are seen two areas of softened tissue more advanced in degeneration

One occupation disease which has been ignored in

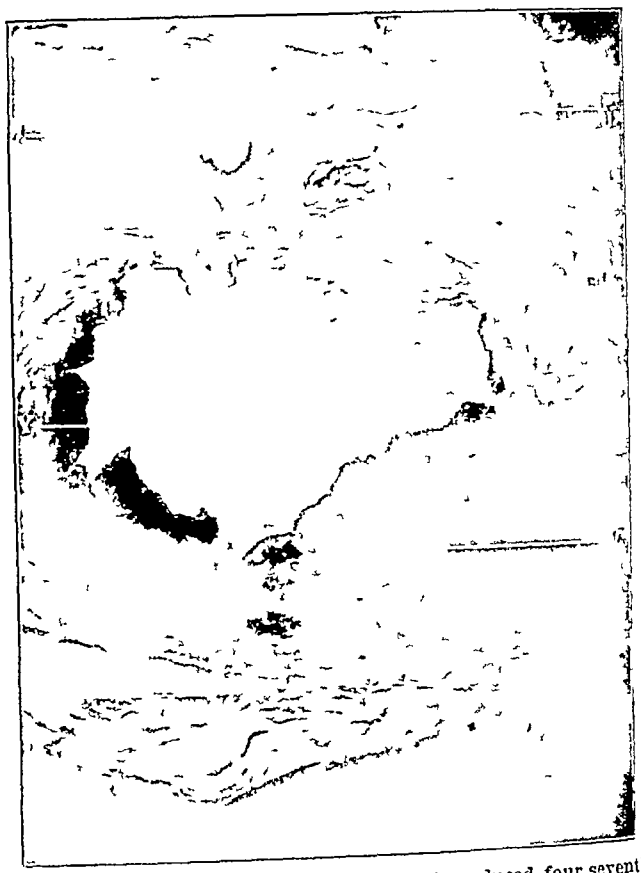

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Fig 20 —Cross section of Peridental Membrane and Alveolar Process Showing Active Inflammation and Another Large Abscess. Scurvy in Man —J Alveolar process P, Perforating canal absorption V Violent inflammation Y, Abscess I^1 Inflamed peridental membrane L^1, Inflammation extending through enlarged Haversian canals

the etiology of interstitial gingivitis is "brass-workers' ague" In almost all brass-workers, a stain varying from a brown to a brownish-green is detectible on the necks of the teeth betwen the crowns and the gum insertion This is most obvious in the upper jaw After a while, as E Hogben[4] has shown, the teeth become loosened and fall out Before these changes in the gums appear nervous symptoms have developed from the brass poisoning

Arsenic should be taken into acount in the etiology of interstitial gingivitis This drug has a very decided tendency in certain subjects to cause, even in small doses, marked stomatitis and irritation of the mucous membranes throughout the body

Tartar emetic and other preparations of antimony, producing irritation of the mucous membranes of the

4 Birmingham Medical Review, 1887

mouth, and elsewhere, may act as predisposing and exciting factors of interstitial gingivitis.

Among the drugs which should be taken into account in the etiology of interstitial gingivitis is potassium bromid. This produces in certain individuals, or when given to excess, marked increase of the saliva with irritation of the mucous membranes of the mouth followed

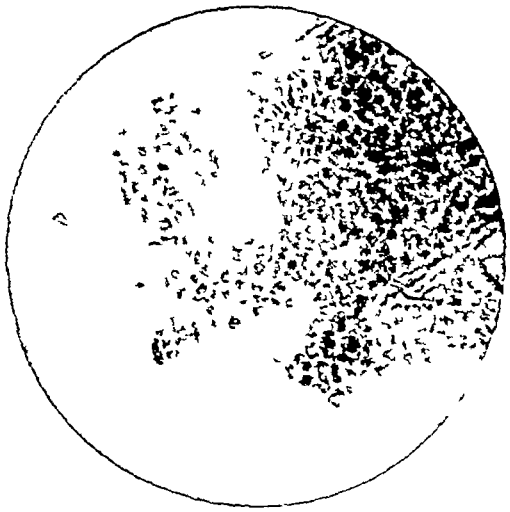


Figure 21

later by dryness of the mouth and shrinking of the gums. The bromids have, as H. C. B. Alexander[6] has shown, a tendency to irritate all the mucous membranes of the body as well as the skin. Therefore in dealing with cases of interstitial gingivitis in which the bromids are being taken, this factor should not be neglected. In these cases the symptoms due to the bromids are apt

Figure 22

to be charged to the nervous state for which the bromids have been given. The irritation of the mucous membrane by the bromids may occur quite early among the untoward effects produced by them. In all probability the bromin rather than the alkali is the source of these untoward effects.

What is true of the bromids is also true to an even greater degree, as has elsewhere been shown of the iodids.

The poison in the blood, together with the diseased peripheral nerves, produce irritation and inflammation of the inner coat of the capillaries. If this irritation does not disappear soon after its inception, the inflam-

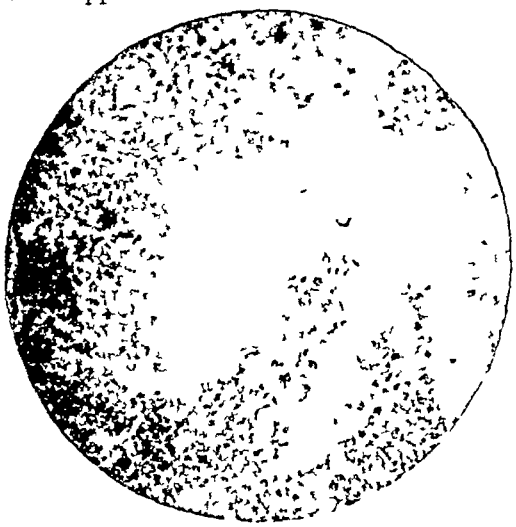


Figure 23

mation tends to affect the other coats of the blood-vessels. Under certain conditions, endarteritis may, however, never involve the other coats of the vessels. When irritation of the inner coat of the capillaries takes place proliferation of the endothelium occurs. This inflammatory growth tends to obstruct the lumen of the vessel. The media may likewise become thickened by

Figure 24

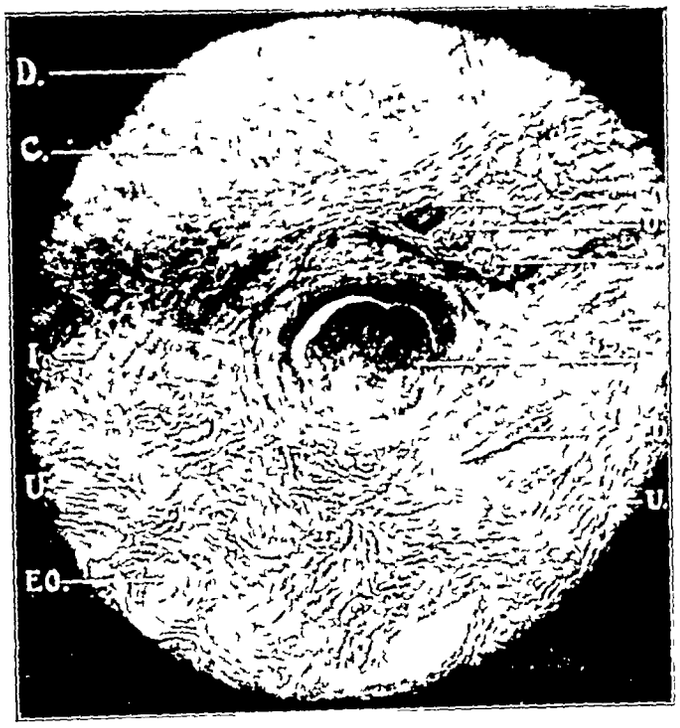
an increased connective tissue. The capillaries become obstructed and finally obliterated. This finally impedes the circulation. Fig. 25 shows such a condition in the scurvy case elsewhere illustrated.

Irritation may be of less intensity but greater duration as in case of syphilis, tuberculosis, scurvy, mercurialism, plumbism, etc., and the results are then slowly effected. Proliferation of sub-endothelial connective tissue gradually increases until it reaches its limit (endarteritis obliterans). This influence of the pro-

[5] Lewin. Untoward Effects of Drugs.
[6] Alienist and Neurologist, July, 1896.

liferation is excited in addition to that of the round-cell infiltration about the structure

The recent studies of Hektoen[7] on meningeal tuberculosis demonstrate that tubercle bacilli may penetrate the unbroken endothelial layers of the vessel and stimulate marked proliferation of the sub-endothelial connective tissue An internal irritant, such as may be produced in the course of any infectious disease or from suboxidation, probably acts upon the endothelium of the walls of the smaller blood-vessels in such a way as to permit the escape through the walls first of serum, then of leucocytes, the latter infecting and surrounding the vessels The effect of the chronic endarteritis is to check the blood supply to the gum tissue Mercury, lead, and other poisons circulating through the blood are forced to remain, hence discoloration of tissue along the gum margin Interstitial gingivitis, resulting in a slow disturbance of nutrition produces overgrowth of connective tissue In all cases of chronic interstitial gingivitis as shown in the illustration, blood-vessels are thus involved



X 150 D D obj Zeiss

Fig 25 —Cross section of Peridental Membrane, Showing Endarteritis Obliterans Scurvy in Man —C, Cementum D, Dentine I, Peridental membrane U, Nerve tissue EO, Endarteritis obliterans

Among the predisposing influences which cause this disease are syphilis, tuberculosis mercurialism, plumbism, brass poisoning lithemia, nephritis, gout, rheumatism, alcoholism, nervous diseases, pregnancy and old age Under certain conditions of the system any and all diseases which tend to lower the vitality producing anemia, will assist in producing this disease The direct cause may be resultant overstrain of the blood-vessels

Owing to obliteration of the arterioles in the alveolar process, stasis of the blood must follow The detritus from the alveolar process,therefore, must remain in the tissue and collect upon the roots of the teeth

The reason disturbances of the system manifest themselves so readily upon the gums and alveolar process, is due to their unstable and transitory nature, hence the marked impression made by autointoxication and drug poisons

7 American System of the Practice of Medicine p 119

In conclusion, I would say that the etiology of this disease may be divided into local and constitutional causes The local may be due to irritation about the gingival borders of the gums, such as tartar, crown and bridge work, etc The constitutional causes are autointoxication and drug poisoning These act by direct irritation through the peripheral nerves and the blood streams (as shown in the experiments by mercurialization of dogs) setting up the inflammation in the capillaries extending throughout the alveolar process and gum tissue Endarteritis obliterans results, cutting off the blood supply A new source of danger to be guarded against is the administration of drugs, more especially those of mercury

The question has arisen whether there exists a specific bacterium which bears the same relation to the pyorrheic stage that the streptococcus does to streptococcus diphtheria This question, raised by Galippe, must, in the light of careful research, be regarded as settled in the negative No special bacterium has been found which complies with the laws of Koch Dogs are liable to this disease Galippe had but to infect their gums with his bacterium to demonstrate its specific pathogenic activity He has not done this As the researches (already cited) also failed to find a bacterium which could comply with this test required by the laws of Koch, it must be admitted that there is no bacteriologic evidence of a specific bacterium Furthermore, the pathologic evidence demonstrates that bacteria play the very subordinate rôle in this disease that they do in ordinary wound infection

Clinical Reports

REPORT OF A CASE OF PUERPERAL ECLAMPSIA, WITH RECOVERY *

JAMES E DAVIS, M D

DETROIT, MICH

There is nothing unusual in this case It is reported because each experience teaches us lessons which may be mutually profitable

L S, aged 20 moderately well nourished, and weighing 120 pounds, with previous health good, period of gestation complete and normal, was in labor about fourteen hours Examination showed dilatation nearly complete, vertex presenting, pains strong, pulse 86, character good, excepting a slight high tension, action regular After about fifteen minutes, during which time there were some four or five pains, descent had taken place almost to the perineum and the membranes had ruptured, when, without warning a convulsion lasting about one minute occurred, manifesting about all the classic symptoms The stertorous respiration, opisthotonus and depression of pulse were very marked A semi comatose condition ensued for about forty minutes, when a second convulsion lasting about thirty seconds occurred This was followed by a condition of extreme irritability with threatening convulsive seizures for a little over two hours During this time the pulse was an interesting study, the average rate being 160 Immediately after the first convulsion the character was decidedly thready and irregular some beats showing high tension, and some being almost imperceptible Improvement was gradual, and in three hours the rate was 96 and the character improved A quiet and sound sleep ensued and lasted eight hours with but two waking periods aggregating forty minutes The subsequent course of the case up to the present, which is eight days, has been uneventful, excepting that on Sunday, the fifth day, a slight convulsion occurred lasting but a few seconds, with succeeding slight stupor for two hours

Treatment —The patient was first seen by the writer eleven

* Read before the Detroit Medical Society, Jan 30, 1901

days prior to confinement There was nothing in the appearance of premonitory eclampsia symptoms, excepting a slight edema of the face, feet and legs Examination of the urine gave the following sp gr, 1022, reaction, slightly acid, albumin 1 per cent, urea about 2 5 per cent, quantity passed in twenty four hours, 45 ounces

An exclusive milk diet was ordered, with a daily cathartic of Rochelle salts and ½ oz of infusion of digitalis three times a day Daily baths and plain water *ad libitum*

Immediately after the onset of the first convulsion chloroform was administered during the period of spasm, followed by ½ dram of fluid extract of veratrum viride Chloroform was next resumed and a forceps delivery performed quickly and easily The child was normal and strong The placenta was delivered without difficulty, in about ten minutes, hemorrhage following was normal The bladder contained 2½ ounces of urine, which was drawn by the catheter soon after delivery Analysis sp gr 1022, reaction, acid, urea, 2 5 per cent., albumin, 2 per cent., a large number of granular and hyaline casts, some of which contained pus cells

Strychnia sulphate—1/60 grain—was given hypodermatically at the end of the placental delivery, to support the heart, in about half an hour after this, morphia sulph, ¼ gr The second convulsion was controlled, as the first, by a few whiffs of chloroform The pulse and nervous symptoms now became gradually quieter and 30 grains of chloral hydrate was given in 16 ounces of water, per rectum Two hot water bottles were kept under the lumbar regions At 7 30 o'clock, 3½ hours after the first convulsion, perspiration was very free and the patient relaxed into a quiet sleep

Subsequent treatment has been potassium citrate, 1 dram in 8 ounces of water every two hours, free catharsis daily, and free perspiration once daily, which was secured easily by the hot water bottles

During the first thirteen hours succeeding delivery, 10 ounces of urine were secreted and since this time from 35 to 45 ounces daily A milk diet has been rigidly enforced

Repeated examinations of urine show persistent albuminuria, though much reduced in severity

831 Fort Street, West

CESAREAN SECTION THREE TIMES IN THE SAME PERSON IN SIX AND ONE HALF YEARS

J W COAKLEY M D

MT ETNA IA

August 3, 1893 I was called to see Mrs P aged 30 years in her fourth pregnancy She had had previously one abortion, and I had performed craniotomy in two preceding labors on account of a contraction of the pelvis Its conjugate diameter was but two and a half inches I decided not to destroy this, the fourth child, and the mother consented to an operation I operated on the morning of August 4 assisted by Drs Sweet and Bryant Every antiseptic detail was carried out I made an incision to the peritoneum, through the abdominal wall in the median line from 4 inches above the umbilicus to within 2 inches of the pubes The peritoneum was opened on a grooved director with scissors and the uterus lifted bodily outside the abdominal cavity and wrapped in hot antiseptic towels The upper part of the wound was temporarily closed with silver sutures to retain the abdominal contents, a broad, flat sponge was wrung out in hot boric acid solution, and placed posterior to the uterus over the abdominal incision for further safety a rubber ligature was passed around the neck of the uterus to prevent hemorrhage The peritoneum being opened, an incision 4 inches long into the uterus and penetrating to the sac was then made, and the child was removed with membranes intact, no vessels of any size were severed The rubber ligature was taken off uterus washed out with hot antiseptic solution The edges of the wound of the uterus were brought together with catgut about half an inch apart made with a curved needle quarter of an inch from the edge of the incision through the muscular tissue of the uterus but not including the mucous membrane Sutures were tied firmly, but not so tight as to strangulate the enclosed tissue

For the purpose of approximating still more the edges of the incision a set of superficial stitches of silkworm gut were inserted between the other stitches about quarter the thickness of the uterine walls Then uterine incision was dusted with iodoform We concluded not to irrigate, because no blood or septic material was found within the abdomen The peritoneum was united with continuous sutures of silkworm gut, the abdominal wall was next coaptated with interrupted sutures of silk, the whole wound being dressed with iodoform gauze and absorbent cotton The next day her temperature was normal and but for slight vomiting from the effects of the anesthetic, the patient was quiet

On the third day, she had a little fever for the first, owing to secretion of milk, the temperature of 100 lasted one day On the fourth day temp normal and she furnished milk for infant and was anxious for food to appease her own appetite On the fifth day, bowels moved and temp normal

On same day dressings were changed, wound completely healed by first intention On the tenth day, no untoward symptoms On the 21st day patient walked through house, and felt as well as ever, excepting muscular debility

I was again called to see this woman in labor at full term pregnancy on July 27, 1895 I was assisted in this operation by Drs Sweet, Salts and Davis This time the case was somewhat complicated by reason of the placenta being attached near and over the os uteri, as in case of placenta previa I cut through the former cicatrix and found the wall of the uterus to be extremely thin

The rubber ligature was tightened, the child turned, to save time, membranes were ruptured, child removed and turned over to Dr Salts

Placenta quickly removed with all adherent portions of decidua carefully separated, all subsequent details finished as related in first operation The patient did not lose more than an ounce of blood at most, neither had I to ligate, nor to use torsion on any vessels Her temperature rose one degree above normal on the third day at the appearance of the milk

During a subsequent pregnancy in the same patient her husband came to me about the eighth month and informed me that his wife was pregnant and wished another operation He thought his wife was in average health for her, I called on her in about ten days from that time to make some arrangement for the operation This visit was in February, 1900, and I was surprised to find my patient in rather poor health, with urine quite heavily loaded with albumin, considerable headache and other symptoms belonging to this condition

I put her on treatment to build up system and relieve kidney trouble I was again called to see her in labor on March 2, 1900, and being about 20 miles out in the country, I was called by telephone in the afternoon I did not arrive in time to operate, that day, so I gave morphia to control pains and postponed the operation until the next morning and had patient prepared as in the two preceeding operations Next morning, March 3, I gave patient morphia and atropin with strychnia

At this operation I had as assistants Drs Sweet, my son, a medical student, and Miss Belle Shaw as special nurse

After the patient was under full anesthesia, I made an incision down to the peritoneum through the abdominal wall I found the peritoneum adhered to the uterus, also to the abdominal wall in places I cut down at the side of the old cicatrix, which in my opinion, is the best way

I broke up the adhesions and lifted the gravid uterus bodily outside of the abdomen, wrapped it in hot towels and made an incision 4 in long in the uterus, after placing a gauze pad under and around the uterus to prevent any amniotic fluid from getting into the abdominal cavity This time I did not use the rubber ligature and would not do so again, as it certainly will injure the tissues of the uterus, if placed around tight enough to control hemorrhage

In 13 minutes from the time I commenced the operation, I had completed all and was ready to tie the abdominal sutures The wound was dressed in same manner as in preceding operations There was but one half ounce of chloroform used during this the third operation The mother was awake and making inquiry of nurse as to whether the babe was a girl or a boy in twenty minutes from time operation commenced

The next day after operation temperature normal, some nausea from effects of chloroform Third day temperature normal Fourth, 1 5 above normal Fifth day bowels moved temperature normal dressing changed found incision hermetically sealed by first intention We used intra uterine douches as before for first four days only There were no untoward symptoms after fifth day and patient made a rapid recovery

Having sold their farm they moved a distance of 3 miles on the 20th day with no bad effects whatever The oldest child a bright little girl is attending school and her teacher claims the honor of teaching one pupil that was never born

with puffiness of the eyelids, edema of the feet and ankles, scanty, high colored urine, fever headache, and perhaps nausea, usually at three or five weeks after disappearance of the rash? The first step refers to the diet Milk, broths, and thin gruels only should be given The bowels should be moved two or three times daily Small doses of calomel, one tenth of a grain per hour, or citrate of magnesia are recommended for this purpose Small doses of aconite, one fourth minim every two hours for a child 3 years old, is prescribed usually as a routine measure, and he has found it a very useful drug in producing diaphoresis In case this fails hot air is brought into use, being conducted under the bedclothes from a lamp, and if this fails hot packs may also be employed, while great care should be exercised as regards exposure A very important remedy which he recommends is hot water flushing of the colon this he thinks is of more value in restoring the kidney function than any other measure It may be used to advantage when the urine first becomes scanty, as well as when convulsions are threatened or present For a child 3 years of age 16 to 24 ounces of normal salt solution at 110 F is introduced by a rectal tube, which should be inserted at least ten inches The object is to have the water retained and the higher it is introduced the better A pint to a pint and one half every six hours does best in most cases The child must be kept in bed until the urine has been normal for two weeks

5 **Uvular Pulsation in Aortic Insufficiency**—Riesman calls attention to the fact that pharyngeal pulsation in aortic insufficiency was first brought to the attention of the profession by F Mueller in 1889 and that little reference to it has since been made He reports two cases in which the phenomenon occurred It is, of course, of the same nature as the capillary pulse and has no special diagnostic value but the knowledge of its existence adds one more point to be looked for in the critical study of a case and sharpens the powers of minute observation

6 **Post operative Hernia**—After first noticing a case of post operative hernia Moore gives the following method which he has used for several years in closing the abdominal wound The peritoneum is first closed by a running stitch of medium weight catgut Silkworm gut sutures are next passed through all of the tissues except the peritoneum by means of a full curved needle of a size suited to the thickness of the abdominal wall The needle passes from without inward through the integument, fascia, muscle and deep fascia coming out next to the peritoneum It then passes from within out through the inner fascia muscle outer fascia and integument In a very thin abdominal wall the needle can be passed through both edges of the wound at one sweep but in most cases it is better to take them separately These stitches are placed about a half inch apart The fascia of the external oblique is next united by a running stitch of medium weight catgut All the ends of the silkworm gut are now caught and pulled upon at once so that they are made taut, after which they are tied lightly Extra skin sutures are applied when needed The advantages are, that the peritoneal cavity is closed without delay, and there is no undesirable material left in the tissues to make future trouble Suturing of the outer fascia gives such support that the silkworm suture need not be tied so tightly as to cause necrosis The operation obliterates any dead space and yields permanently satisfactory results

8 **Formalin**—The use of formalin in the treatment of suppurative otitis media is advised by Ward He finds that by the judicious use of formalin the following results may be obtained 1 Fetid odor quickly disappears 2 There is an early cessation of the discharge 3 It protects against the formation of granulations, and small granulations are destroyed by alcoholic solutions 4 It promotes healing of ulcerated mucous membrane skin abrasions, and inflammation of the external auditory canal 5 It retards, but does not entirely check bone necrosis

10 **Permanent Gold Preparations**—The usual temporary nature of gold stain on nervous tissue is first mentioned by Billstein who reports her results with a mixture made by 8 parts of a 1 per cent solution of gold chlorid and 2 parts of formic acid boiled three times and then cooled The tissue is put in the cold material, which must be kept in the dark After one hour it is washed in distilled water and placed in a mixture of 10 parts of formic acid and 40 parts of distilled water and exposed to diffuse daylight The reduction occurs at 24 to 48 hours when the violet tissue is transferred to 70 per cent, and after 24 hours to 90 per cent alcohol and kept in the dark for at least one week It is then ready for final manipulation and may be teased and mounted in acidulated glycerol or imbedded and cut into sections This method has been attributed to Stöhr, and is similar to Ranvier's technique, "Procede de l'or bouilli" Stöhr, however, advises longer boiling of the gold chlorid and formic acid mixture The author has found the stain to remain permanently two and three years, and apparently it will endure indefinitely

13 **Yellow Fever**—Carter's article deals with the subject of house infection and gives illustrations showing the interval between the infection and the first appearance of yellow fever The article was mainly written before the recent publication of the observations of Reed and Carrol at Quemados, and he says that they agree entirely with his result, the incubation after the mosquito bite being only slightly longer than that which he found from apparently infected houses, and Reed's theory agrees absolutely with the conclusions of this paper

14 **Cancer**—Bandler reviews the recent experimental researches on the origin of cancer He quotes Cullen as stating that Gaylord has not in any case experimented with the cure culture and that the recovery of the organism from the cancer produced is hardly touched upon by him He says, however, that as Gaylord's communication is preliminary the complete work may yet solve these problems The larger part of his paper is a review of Leopold's work on the production of cancer from the injection of blastomycete and he admits that the causal relation of these organisms to the growths produced in animals must be granted The decision concerning the character of these neoplasms and their actual relation to carcinoma and sarcoma is a question yet to be settled

15 **The Pre insula**—The relation between the development of the insula and mental development is the subject of Spitzka's article E C Spitzka has shown in 1880 that the insula had a greater development in the porpoise than the human species but it appears that the greater part of this development was in the post insula and the theory was offered that it had to do with the excessive development of the functions of audition and equilibrium in these mammals The observations of Waldschmidt and Donaldson on the insula of deaf mutes are referred to and also the theory that exposure of the insula indicates defective brain development This last is apparently contradicted by results of examination of the brain of the Seguins previously published by Spitzka and it is possible that a similar exposure of the insula exists in the brain of Chauncey Wright which is being examined by B G Wilder In the human subject the development is greatest in the pre insular portion and the conclusions to be drawn from the Seguin brains as correlated with their known abilities are 1 In the highly intellectual (for example, the two Seguins) owing to the excessive growth and development of the left pre insula causing a displacement of the opercula, thrusting them apart as it were, and even though the latter be very well developed 2 In the defective, exposure of the pre insula is due to deficient development of the opercula, and because these fail to approach each other In such cases the insula itself is with a single exception in the series studied by me of inferior development indicated not only by the soundings of the Sylvian cleft but also by the flatness of configuration and lesser area of the insular cortex A possible additional factor is that the deeper and more numerous the infractuosities of the insula the more numerous are the important branches of the medicerebral artery and the greater their caliber Since the greater blood supply is presumably a condition of higher potency of function, insular development *per se* is an expression of general development in this other respect as well as in the purely morphologic one He asks, putting the facts together of the relative proportions of the two extremities of the insula in the porpoise and in man and in the light of Waldschmidt's

observation, would it be rash to propose that the post insula shares in its development that of the auditory sense center, by virtue of association neurons with short axons, while the growth of the pre insula is more in consonance with that of the true "speech center" in the subfrontal operculum? After all, the development of the pre insula is only an intense expression of that feature by which the human brain excels all other animals, for in no lower form do we find the insula so fully developed in its cephalic region

17 **Modified Urethral Dilator handle** —The modification proposed by Valentine consists in putting the dial on the top of the handle instead of the side and having two heavy metal projections for the operator's thumb and index finger The advantages are that the dial is continuously under the operator's eye and out of the range of the patient's, and the improved mechanism does not increase the cost

22 See THE JOURNAL of June 8, p 1606

23 **Chronic Seminal Vesiculitis** —Chute and O'Neil call attention to the importance only recently recognized, of seminal vesiculitis and describe its symptoms diagnosis and treatment Among the symptoms they specially mention are feelings of vague discomfort in the rectum and perineum, pain and discomfort on defecation persistent discharges, especially those containing small comma shaped shreds from the prostatic urethra, sometimes frequency of micturition, tenesmus, etc The direct symptoms are for the most part urinary in character and not particularly distinctive The reflex symptoms are those of sexual neurasthenia The most characteristic symptoms are irregularity in the function of erection A combination of neurasthenic symptoms with these latter is almost pathognomonic The details of physical examination of the prostate, etc are mentioned The treatment which has given the writer the best results is massage of the vesical ducts and of the prostate as well He warns against advising sexual indulgence as a therapeutic measure It is probable that a certain number of cases of impotence and many of sterility are due to this condition, which gives its treatment wider importance than that mere relief of the discomfort He would strongly advise examination by rectum of all patients with urethral disease not progressing favorably, particularly those presenting so called neurasthenic symptoms

24 **Iodophilia** —This term is coined by Dunham to designate the reaction shown by the blood, in which the polymorphonuclear neutrophiles take on a reddish brown coloration when examined with a solution of iodin dissolved in iodid of potassium The solution is made up as follows Three parts of potassium iodid are dissolved in 100 parts of water In this is dissolved 1 part of iodin. The resulting solution is thickened to a syrupy consistency by the addition of gum arabic and the blood smear is mounted in a drop of this syrup and a bit of filter paper placed at the edge of the cover glass to absorb the excess of fluid The specimen is then ready for examination with an oil immersion lens The reaction is apparently always present in progressive suppurations and in progressive pneumonia and may occur in a few other diseases such as grave anemias leukemia, etc Its value however, lies in cases of doubtful suppuration and doubtful pneumonia He gives illustrations of its use in cases of abscess and inflammation of the lungs

26 **Focal Epilepsy Operations** —White refers to a former article of his on the influence of operation *per se* and discusses the *rationale* of the effect The problems finally took this shape in his mind When can subjects of epilepsy receive, without undue risk of life or health the benefit of both operative interference and sedation of affected brain area? 2 Can operation be based on any but empirical grounds? If on the latter only does the evidence warrant its continuance? Is there any means of securing sedation that is of applying the general therapeutic principle of rest in such a way so that natural processes may have an opportunity to effect a cure without at the same time disturbing or interfering with the general health He decides at once that as regards the idiopathic epilepsies and pseudo-Jacksonian cases the answer to these questions should be in the negative, but as to true focal epilepsy, whether traumatic or not, the case may be slightly different. In fact the results of operation, while more encouraging, are not sufficiently so to justify us in ignoring the greatly increased risk and post operative paralysis following excision of the center, without which trephining becomes an incomplete and an unsatisfactory operation He was therefore led to try the following method The affected center is, of course, determined in advance by the most careful study and observation of the case Its relation to the cranium is indicated by a silver or iodin mark upon the shaven scalp two days before the operation The scalp is sterilized and resterilized three times at intervals of twelve hours not only before the trephining, but also before each subsequent application of the treatment. A horseshoe shaped flap is raised and a half inch button of bone removed with a small trephine The dura is left intact. Thirty minims of a sterile 2 per cent solution of eucain is then injected into the brain substance at the center of the trephine opening the point of the needle being introduced about three quarters of an inch The needle is gradually withdrawn as the last ten minims of the solution are injected The flap is replaced The patient is returned to bed, and on the day of operation, and the following day, should receive full doses of bromids At intervals, the proper length of which can only be determined by experience, the scalp having been sterilized as above, the injection is repeated The patient should be kept in bed at least four hours after each injection and should take bromids for from one to two days" He is not convinced that this method has any additional value, but he reports two cases in which it was tried at the University Hospital He admits that this can not be said to establish even the entire safety of the procedure as convulsions in Case 2, which followed one of the injections were of marked severity Neither can it be said that the results obtained were noticeably better than those seen to follow the very miscellaneous procedures that have been reported, but he still thinks that the possibilities of benefit would justify him in placing it conservatively before the profession

27 **Jacksonian Epilepsy** —The views maintained by Putnam are 1 that operations of many different sorts are of value 2 that the beneficial action of these operations, although complex in character, is mainly due to the induction of a temporary inhibition of the morbid action of the cortex, which permits of the establishment of a more normal tendency, 3 that the removal of the apparently normal cortex is rarely advisable, and, when beneficial acts mainly as above indicated 4 that the cause of the persistence of the "epileptic habit" is not to be sought alone in anatomic peculiarities of the brain, but that it shares the vitality and independent endurance of memories in general Also the symptom groups which present themselves after cortical lesions conform, in general, to certain special types which recur without being closely dependent on the localization of the cerebral injury These symptom groups represent, in fact, efforts at the formation of a new equilibrium on the part of a being endowed with consciousness and memory on the one hand and with a complex brain mechanism on the other The principle on which this readjustment goes on in cases of actual cerebral lesion is analogous to that which is operative in "hysteria"

28 **Prostatectomy** —Horwitz' conclusions regarding prostatectomy are 1 With the exception of ligation of the internal iliac arteries prostatectomy is the most dangerous of any operation that has been recommended for the relief of prostatic obstruction due to hypertrophy 2 Suprapubic prostatectomy is the safest method especially if combined with perineal drainage 3 The best period to select to perform this operation is early, before the break down of catheter life and serious complications have supervened 4 Either an atonied or contracted bladder of long standing, associated with chronic cystitis attended by the formation of sacs, or pouches, are contra indications for the operation 5 A partial prostatectomy is indicated in those cases where a valve-like lobe exists which interferes with urination or where there is partial hypertrophy of one of the lobes 6 A complete prostatectomy is indicated where a hypertrophy of the three lobes has taken place especially if the condition is associated with tumor for

minutes The medium should be absolutely neutral A few minutes before using, 1 05 gm of carbolic acid are added to each 1000 gm of fluid The medium must be used as a thin pellicle, and about 2 c c of the fluid is poured into each one of a dozen tubes in the water bath at 42 C They are then sown with a platinum loop taken from the bouillon first poured out of the centrifugalizer, which is ample for four tubes The platinum loop must therefore be dipped in the bouillon three times to inoculate the dozen tubes The latter are then warmed to 46 C in the water bath and the fluid is spread over the inside of the tube by turning and rolling it The tube is then placed upside down, the fluid settles to the bottom on the cotton stopper, but a thin pellicle remains adherent to the inner surface of the glass and hardens The cotton plug is then replaced with a cork taken from a vessel containing melted paraffin This hermetically seals the tube and prevents the gelose from drying Kept at 37 C, the colonies of the colon bacillus develop in the course of sixteen to seventeen hours Each colony visible to the naked eye is marked with ink and the tube is replaced in the oven By the eighteenth to the twenty fourth hour a number of new, very small colonies appear, which, as the microscope shows, are formed of the typhoid bacillus and a micrococcus The bacillus is then transferred to a similar solution of peptone to which lactose has been added The agglutination test may occasionally differentiate the bacillus at once The fermentation of the lactose is an important means of differentiating the typhoid bacillus The fermentation is determined in the neutral fluid with litmus tincture The medium turns red in the presence of the colon bacillus while the typhoid bacillus leaves it violet and later turns it blue, or may sometimes decolor the lower portion This reaction on the part of the lactosed medium—which from neutral at first becomes gradually alkaline, never acid—and microscopic determination of the characteristics of the typhoid bacillus, establish its identity with positive certainty in three or four days at most Tests of Seine water from the hydrants always disclosed the typhoid bacilli by this technique and it was found alive in water inoculated with it after fifteen to forty four days Chantemesse concludes by emphasizing the fact that exhaustion, diminished vitality and possibly a peculiar condition of the intestinal flora at certain seasons of the year, may afford the conditions necessary to restore attenuated, non virulent typhoid bacilli ingested by man, to pristine virulence in a manner similar to the influence of the proliferating and rejuvenating conditions in the first stage of his technique

Revue de Gynecologie (Paris), v, 1 and 2

Etiology of Extra Uterine Pregnancy F STEPOWSKI—The conclusions derived from study of thirty seven cases of extra uterine pregnancy at Neugebauer's clinic, are that two conditions are indispensable for the production of extra uterine pregnancy 1, that the mucous membrane of the tube, under the influence of the fecundated ovum, reacts on the decidua and renders conditions favorable for the incubation of the ovum, 2, the existence of some cause which prevents or paralyzes the passage of the ovum into the matrix

Permanent Sound for the Ureter J ALBARRAN—After nephrotomy Albarran inserts a sound in the ureter and leaves it for several days, to prevent or cure a renal fistula It is useful only in urinary or uro purulent fistulæ—in case of pus alone it can do no good In this case it is not the kidney, but merely the cellular tissue as such, that is suppurating, and the kidney may be still whole, allowing the urine to be normally voided When the kidney itself secretes pus, without admixture of urine, the organ is so destroyed that there is no interest in preserving it longer, but in case of simple, purulent fistula the kidney plays but a subordinate role The organ may still be useful and there is every reason to preserve it When, however, the kidney has ceased to secrete urine the purulent fistula will heal more rapidly if the useless organ is removed Catheterization of the ureter is not indicated even in cases of urinary or uro purulent fistula, if the ureter is impermeable or the bladder irritable But in appropriate cases he inserts a No 6 sound in the bladder before the nephrotomy Then, when the kidney has been exposed and incised, he pushes the tip of this sound into the incision in the kidney, and fits over it a 10 or 11 Charriere sound, with four large eyes in the side and the lower end made to fit over the tip of the No 6 sound Both are then drawn down together and worked out through the meatus until the tip of the large sound is in the renal pelvis The lower end is then fastened with a thread to the skin The wound in the kidney is then sutured over a drain The organ is irrigated through the permanent sound two or three times a day The threads fastening it in place are removed the twelfth day, and it is discarded between the eighteenth and twenty eighth days The patients bear the ureteral sound better than the ordinary urethral sound The result was extremely satisfactory in every one of the fifteen cases described A fistula developed in eight, but healed over in one to four days Six were cured but in one the sounding was a failure, as the ureter was inserted above the bottom of the pelvis In another, the persistence of gangrenous fragments prevented healing He left the sound in place for ten to twenty six days in the cured cases, but has since learned that it is unnecessary to retain it after urine has ceased to trickle through the wound In two cases symptoms of retention required a repetition of the sounding When necessary to change the sound, he first inserted a mandrin or guide in it to the tip He then withdrew the sound over the mandrin and replaced it with another well lubricated sound, which he slipped on over the mandrin to the renal pelvis and then withdrew the mandrin

Semaine Medicale (Paris), May 29

Treatment of Old Luxations of the Shoulder F LEGUEU—After failure of the ordinary measures, Legueu cuts an osteo muscular flap by section of the acromio clavicular arc not dividing any of the muscles Turning this flap over allows wide and easy access to the joint In a case described in detail the head was found so firmly lodged under the coracoid muscles that it was impossible to dislodge it In order to do this the coracoid process was cut with the scissors and the muscles attached to it were stretched This released the head and the hindrance to reposition was found to be a fracture of the anatomic neck of the humerus, with laceration of the capsule and retraction of the capsular opening The head of the humerus was resected and fitted to the capsule The coracoid process was sutured with silver wire, the acromion united with the scapula and after insertion of a drain the skin was sutured The patient could move and bend her arm with ease when dismissed seventeen days later

Differentiating Sign of Infantile Pneumonia WEILL—Pneumonia in young children can be differentiated in its incipiency by the pathognomonic sign described by Weill, the lack of expansion in the subclavicular region, independent of the site of the pneumonic lesion The little patient being on his back, the chest exposed, and respiration regular, it is easy to note the difference in the expansion between the two sides On placing the fingers on the subclavicular region on either side, they are lifted as by a wave on the sound side, while on the other the lack of expansion is evident, even in the very first days of the disease In pleurisy or pneumothorax the lack of expansion corresponds to the seat of the lesion, but in pneumonia it is invariably subclavicular

Berliner Klin Wochenschrift, May 27

Functional Importance of Pyramidal Tracts M ROTHMANN—Reviewing the clinical and experimental experiences of recent years in regard to the pyramidal tracts, Rothmann concludes that we have no evidence for the assumption that they have any special function The motor function is the property of the combination of cerebrum, thalamus, corpora quadrigemina and spinal cord Comparative anatomy however, shows that the pyramidal tracts are gradually usurping this duty as evolution progresses They are absent in birds and in the lower animals are in the posterior columns, and in the lateral columns in the higher animals, while in man they are in both the lateral and anterior columns This progressive development suggests that the pyramidal tracts are a link in the great chain of phenomena which show that the cerebrum in its evolution is constantly assuming greater predominance

and subordinating the centers of the mesencephalon and the thalamencephalon

Chaloderma—L Kelly has coined this new term as descriptive of the case of a patient whose skin hangs loose and pendent The muscles beneath are sound and the skin hangs away from them and bags from the arms, calves and trunk, but the buttocks and mammæ are most conspicuously affected The changes in the dependent skin are only in the reticular layer and the subcutis The lack of elastic fibers, and the extreme dilatation of the blood vessels, with a diffuse, small celled infiltration are noticeable

Paralysis of the Rectum A HESSE—Wallace has reported a case of alvine incontinence in a child, from paralysis of the rectum, much improved by astringent enemata Hesse describes a similar case, the patient a boy of 6 with complete paresis of the bladder and anal sphincters, alvine and urinary incontinence strabismus and chronic intestinal catarrh He cured the intestinal affection with appropriate diet, tannalbin and Carlsbad waters, and with the subsidence of the catarrhal symptoms, the rectal paralysis was also cured Partial enuresis still persists, but the lad has been completely relieved of all his other disturbances by this removal of the cause, the chronic catarrh Hesse urges others to seek the causal factor in some local lesion in these cases, and not be so ready to attribute them to the nervous system

Deutsche Med Wochenschrift (Berlin and Leipsic), June 6

Vicarious Menstruation Through the Bladder BUENTING—In a case under the writer's direct observation, menstruation occurred twice through the bronchi, at a year's interval, and ten years later through the bladder Each time the phenomenon happened in August The young woman was and is in robust health, with no symptoms on the part of the organs involved

A Foreign Body as a Hindrance to Delivery CZARNECKI—A metal box—10x4 cm in size—was inserted in the vagina by a girl at her first menstruation for the purpose of checking the flow She was unable to remove the box later and informed no one of its presence, not even her husband when she married. She passed through an abortion and at that time the box probably slipped into the uterus The writer was summoned to attend her in childbirth, and delivery was impossible until the box was removed with forceps The foreign body had thus remained thirteen years in the vagina and eighteen months in the uterus without causing disturbances of any kind until it mechanically interfered with delivery

Wiener Klin Wochenschrift, May 23

Juvenile Form of Progressive Paralysis J A HIRSCHL—Study of twenty cases of juvenile progressive paralysis showed that congenital lues was a very frequent factor, occurring in 17 out of 20 patients Also that mentally deficient individuals were more prone to the affection than is the case among adults, and that the prodromal period is characterized by more pronounced symptoms Another difference is the fact that simple dementia is the usual termination, scarcely ever paralytic mania or paralytic hypochondria, the lack of remissions when the disease is at its height, and that symptoms of irritation as well as seizures are common The duration is comparatively longer and the autopsy reveals a diffuse sclerosis of the brain with marked leptomeningitis The affection usually commences between the fourteenth and sixteenth years Puberty evidently has the same influence as the menopause in paralysis in women, but at the same time it is possible that the paralysis requires the same period for incubation in the young as it does in adults, that is about fifteen years Assuming that the congenital lues is the causal factor—the same as acquired lues in adults—the period before the outbreak of the paralysis corresponds in each case

May 30

Iodoform Filling for Wounds N HACKMANN—Wounds that form a cavity and defects in bones are treated by Moestig Moorhof as a dentist fills a tooth A mixture of of sesame 20 parts, spermaceti 40, and iodoform, 30 to 60 [illegible] the cavity while still warm It iodoform into close contact with every particle of the tissues This filling is particularly useful to close cavities in the bones, the tallowy substance is gradually absorbed as new bone is formed The influence of the materials in the filling is directly stimulating to the tissues, and granulation proceeds more rapidly and satisfactorily than without it The foreign mass is gradually devoured as it were, by the crowding granulations A few cases are described in detail, showing the great benefits derived from this aseptic and antiseptic, stimulating substitute for missing bone or tissues The filling is sometimes partially expelled by the new tissues forming beneath, in open wounds The mixture is kept in a bottle inside a thermophor, ready for use The cavity in the bone may be sterilized with superheated air In applying the filling to a tuberculous cavity in a long bone, a constricting bandage is applied above, the cavity filled with the mixture and the constricting band removed after it has solidified The skin is then sutured over the defect Radiographs taken at intervals show that the filling gradually grows smaller, while the encroaching new formation of bone casts a normal shadow

St Petersburger Med Wochenschrift, May 25

The Pathology of the Jews M KRETZMER—The exceptional fertility of the Jews and their low mortality are shown in Hoffman's statistics for eighteen years Prussia The mortality was 21 61 per cent, while among the rest of the population it was 29 61, the increase during the same period was 34 75 per cent, in the rest of the population, less than 28 per cent. The excess of boys over girls is another feature of their physiology Schwimmer found in Austria that 128 5 boys were born to each 100 girls, while the usual proportion is 105 8 The nervous system seems to be the locus minoris resistentiæ among the Jews The official report for Prussia and Bavaria for the year 1871 showed that there were nearly twice as many Jews among the blind, deaf, dumb and insane as from the remainder of the population Progressive paralysis and post puerperal mental disturbances are more frequent, and, in Russia at least, trachoma, myopia, cutaneous affections and abdominal diseases Affections of the respiratory passages are less frequent among the Jews Recent military statistics showed that consumptives in the army were in the proportion of 1 Jew to 22 3 Christians and 1 7 Mohammedans Eminent Jews in the profession of late years are Traube, Heidenhain, Henle, Cohnheim, Bernstein, Senator, Liebreich, Saenger, Freund, Jaffe, Schreiber, Mendel, Hirschberg, Zuckerkandl and Meynert

New Patents

Patents of interest to physicians etc June 4 and 11

675 556 Atomizer Alfred Clarkson Fall River Mass
675 821 Attachment for truss pads Cornelius Donovan, New York City
675 775 Apparatus for filling capsules John G Gilmer St Petersburg Fla
675 739 Device for testing eyes Christian F Kantlehner Chelsea Mich
675 674 Elevating or lowering device for dental chairs Frank Ritter, Rochester N Y
675 678 Movement cure apparatus Charles A Scholder Lausanne Switzerland
675 700 Device attached to hats to aid in hearing Albert G Zimmerman Chicago
676 178 Mercurial barometer Arthur S Davis Leeds England
676 124 Hot air cabinet Henry A Dygert Philadelphia
675 897 Water bag syringe Wm D Martin Warsaw N Y
675 966 Inhaler John Y McFarland, Chicago
676 269 Return flow syringe Denwood N L Newbury New York City
676 158 Shirt for invalids Wm E St John Leonardsville N Y
676 283 Tonsillotome Ernst Stratmann New York City
676 379 Eye cups Frank E Young Canton Ohio

The Public Service

Army Changes

Movements of Army Medical Officers under orders from the Adjutant General s Office Washington D C June 6 to 12 1901 inclusive

Percy M Ashburn lieutenant and asst surgeon U S A on his arrival at San Francisco Cal will proceed to Fort Sheridan Ill for post duty

Thomas S Bratton captain and asst surgeon U S A

arrival at San Francisco, Cal to proceed to Washington Bar s, D C for duty at the General Hospital at that place
Fitzhugh Carter, major and surgeon, U S A, leave of ab e granted
enry R Carter, Jr contract surgeon, from Vancouver Bar s Wash, to San Francisco, Cal en route for duty in the sion of the Philippines
dward T Comegys major and surgeon, U S A, relieved from her duty in the Division of the Philippines, on the expiration is present sick leave he will report for duty at Fort Meade, S D
illiam D Crosby, major and surgeon, U S A, from New York y to post duty at Fort McPherson, Ga
Ryan Devereux, contract surgeon from Washington Barracks, C to temporary duty at Fort McPherson, Ga
asil H Dutcher, lieutenant and asst surgeon, U S A, now on y in the U S Military Hospital Nagasaki, Japan is relieved m duty in the Division of the Philippines, and will proceed to rt Hancock N J, for post duty
James J Erwin, captain and asst surgeon Vols, honorably dis arged from the service of the United States, to take effect June , 1901
Powell C Pauntleroy, major and surgeon, Vols (captain and st surgeon U S A), relieved from further duty in the Division the Philippines and will proceed to Madison Barracks N Y, r post duty
Joseph H Ford lieutenant and asst surgeon, U S A, from the vision of the Philippines to Fort Washington, Md for post duty
Clyde S Ford lieutenant and asst surgeon U S A, from the vision of the Philippines to duty at Fort Morgan, Ala
Harry L Gilchrist lieutenant and asst surgeon U S A on s arrival at San Francisco, Cal, will proceed to Vancouver Bar cks Wash for duty at that post
Charles R Gill contract surgeon former orders revoked he will oceed to Fort Totten N Y to accompany the Second Battalion Engineers from that post to San Francisco Cal
Joseph B Girard lieutenant col deputy surgeon general U S from duty at the Medical Supply Depot, St Louis, Mo, to ncouver Barracks Wash, as post surgeon and chief surgeon, partment of the Columbia
Henry S Greenleaf lieutenant and asst surgeon U S A from e Division of the Philippines to duty at Alcatraz Island Cal
Richard S Griswold major and surgeon Vols, recently appoint and now in New York City N Y to proceed to San Francisco l en route for service in the Division of the Philippines
Harry M Halloch, captain and asst surgeon U S A, from Fort Pherson, Ga, to San Francisco Cal, en route for service in e Division of the Philippines
Eugene H Hartnett Lieutenant and asst surgeon U S A on s arrival at San Francisco, Cal, will proceed to Fort Columbus Y, for duty at that post
Deane C Howard captain and asst surgeon U S A, former ders amended so as to direct him to proceed to Havana Cuba, duty in the Department of Cuba
John S Kulp major and surgeon Vols so much of former orders assigns him to Fort Hancock, N J is amended assigning him duty in New York City as attending surgeon examiner of re its and medical superintendent of the Army Transport Service
Walter D McCaw major and surgeon U S Army detailed a mber of the board in session at Manila P I for the examina n of candidates for admission to the Medical Corps of the Army, ieving Major William J Wakeman surgeon, U S Army
H E Menage contract surgeon leave of absence from the De rtment of the Colorado extended
Ben H Metcalf contract surgeon to report from Fort Banks ss by letter to the Surgeon General for annulment of contract dward W Pinkham, lieutenant and asst surgeon U S A on val at San Francisco, Cal, will report for duty at Fort Banks s
Walter Reed major and surgeon U S A, from Washington D to Fort Monroe Va on official business on the completion of ich he will return to his proper station
Edward R Schreiner, lieutenant and asst surgeon, U S A from ty in the Division of the Philippines to Fort Howard, Md
Samuel L Steer lieutenant and asst surgeon U S A on arrival San Francisco, Cal, will proceed to Fort Dupont Del, for duty that place
Henry R Stiles, captain and asst surgeon U S A from Madi n Barracks, N Y, to San Francisco, Cal, en route for service the Division of the Philippines
Samuel M Waterhouse, lieutenant and asst surgeon, U S A, om Fort Meade S D to San Francisco, Cal, en route for rvice in the Division of the Philippines
Roy A Wilson, contract surgeon, from Fort Totten N Y to n Francisco, Cal, en route for service in the Division of the ilippines
Francis A Winter, captain and asst surgeon U S Army, from rt Sheridan Ill to duty at Jefferson Barracks, Mo
Halsey L Wood, contract surgeon, leave of absence granted
Marshall W Wood, major and surgeon, U S A, from Jefferson rracks Mo, to St Louis, Mo, to take charge of the Medical pply depot in that city

Navy Changes

Changes in the Medical Corps of the Navy, week ended June 15, 01

Dr G M Mayers appointed asst surgeon from June 1, 1891
Asst Surgeon J F Murphy, ordered to the Naval Academy ne 15
Surgeon A R Wentworth detached from the Solace

Asst Surgeon G M Mayers ordered to the Pensacola Navy Yard, June 18

Marine Hospital Changes

Official list of the changes of station and duties of commissioned and non commissioned officers of the U S Marine-Hospital Service for the fourteen days ended June 13, 1901

Surgeon J H White, to report at Washington, D C, for conference.

Surgeon L L Williams, granted leave of absence for five days from June 6

Surgeon W J Pettus, granted leave of absence for three days from June 13

P A Surgeon J A Nydegger, granted leave of absence for thirty days from June 8

P A Surgeon L K Sprague, granted leave of absence for thirty days from May 30

P A Surgeon H W Wickes, granted leave of absence for four days from June 3

Asst Surgeon C E Decker, granted leave of absence for ten days on account of sickness

Asst Surgeon W W King, granted leave of absence for four days

A A Surgeon J E Pready, granted leave of absence for one day June 19

A A Surgeon Henry Decrow, granted leave of absence for ten days from June 8

A A Surgeon W C Mason, granted leave of absence for six days from June 23

A A Surgeon F R Smyth, leave of absence for three days granted by bureau telegram of May 31 1901, revoked

A A Surgeon J G Stanton granted leave of absence for fifteen days from June 3

BOARD CONVENED

Board convened to meet at Washington D C, on June 7, 1901 for the physical examination of an applicant for cadetship in the U S Revenue Cutter Service Details for the Board P A Surgeon H D Geddings, chairman Asst Surgeon B S Warren, recorder

Health Reports

The following cases of smallpox, yellow fever cholera and plague have been reported to the Surgeon General, U S Marine-Hospital Service during the week ended June 15, 1901

SMALLPOX—UNITED STATES AND INSULAR

Alaska Douglas City May 25 5 cases
California San Francisco, May 25 June 1 4 cases
District of Columbia Washington May 30, 1 case
Illinois Chicago June 1 9, 6 cases
Indiana Michigan City, June 3 10, 2 cases South Bend, June 1 8 1 cases
Kansas Wichita June 1 8 7 cases 1 death
Louisiana New Orleans June 1 9, 5 cases 1 death, Shreveport, May 25 June 1, 2 cases
Maine Portland June 1 8 1 case
Maryland Baltimore June 1 8, 1 case
Massachusetts Boston June 1 8 1 case Fall River June 1 8 1 case Marlboro June 1 5 1 case New Bedford June 1 8, 27 cases 1 death Somerville June 1 8, 1 case
Michigan June 1 8, Detroit 33 cases West Bay City, 1 case.
Minnesota Winona June 1 8, 1 case St Louis May 26 June 2, 32 cases
New Hampshire Manchester June 1 8, 4 cases
New York New York, June 1 8 86 cases, 16 deaths
Ohio Cincinnati May 31 June 7 5 cases Cleveland June 1 8, 30 cases Toledo, June 1-8, 1 case
Pennsylvania June 1 8, Lebanon, 1 case Philadelphia 1 death Pittsburg 5 cases
Rhode Island Providence June 1 8, 1 case, 1 death
Utah Ogden, May 1 31, 11 cases Salt Lake City, June 1 8, 4 cases
Washington Tacoma May 26 June 2 1 case
Wisconsin Green Bay June 2 9, 2 cases
Philippines Manila April 13 20 9 cases
Porto Rico San Juan May 10 extinct 8 cases on island

SMALLPOX—FOREIGN

Austria Prague, May 18 25 3 cases
Belgium Antwerp May 18 25 3 cases 1 death
Brazil Pernambuco April 1 15 27 cases
China Hongkong April 22 27 7 cases 5 deaths
Colombia Panama May 27 June 3 5 cases 1 death
France Paris May 18 25 15 deaths
Great Britain Glasgow May 25 31 42 cases, 1 death
Greece Athens May 18 25 2 cases
India Calcutta, May 4 11, 34 deaths Karachi, April 28 May 12, 9 cases 3 deaths
Italy Naples May 19 26 161 cases 28 deaths
Japan Nagasaki, May 6, 1 case on U S S *Indiana*, Tokyo, May 11, 3 cases
Manitoba Winnipeg May 25, June 1, 2 cases
Mexico Mexico City, May 19 June 2, 3 deaths
Russia Odessa May 11 26, 9 cases 1 death St Petersburg, May 4 18, 24 cases 5 deaths Warsaw, May 4 11, 8 deaths

YELLOW FEVER

Mexico Vera Cruz May 18 25 1 death

CHOLERA

India Bombay May 7 14 3 deaths Calcutta May 4 11, 47 deaths